State of California

THE RESOURCES AGENCY

Department of Water Resources

BULLETIN No. 130-63

HYDROLOGIC DATA: 1963

VOLUME III: CENTRAL COASTAL AREA

SEPTEMBER 1965

HUGO FISHER
Administrator
The Resources Agency

EDMUND G. BROWN
Governor
State of California

WILLIAM E. WARNE
Director
Department of Water Resources

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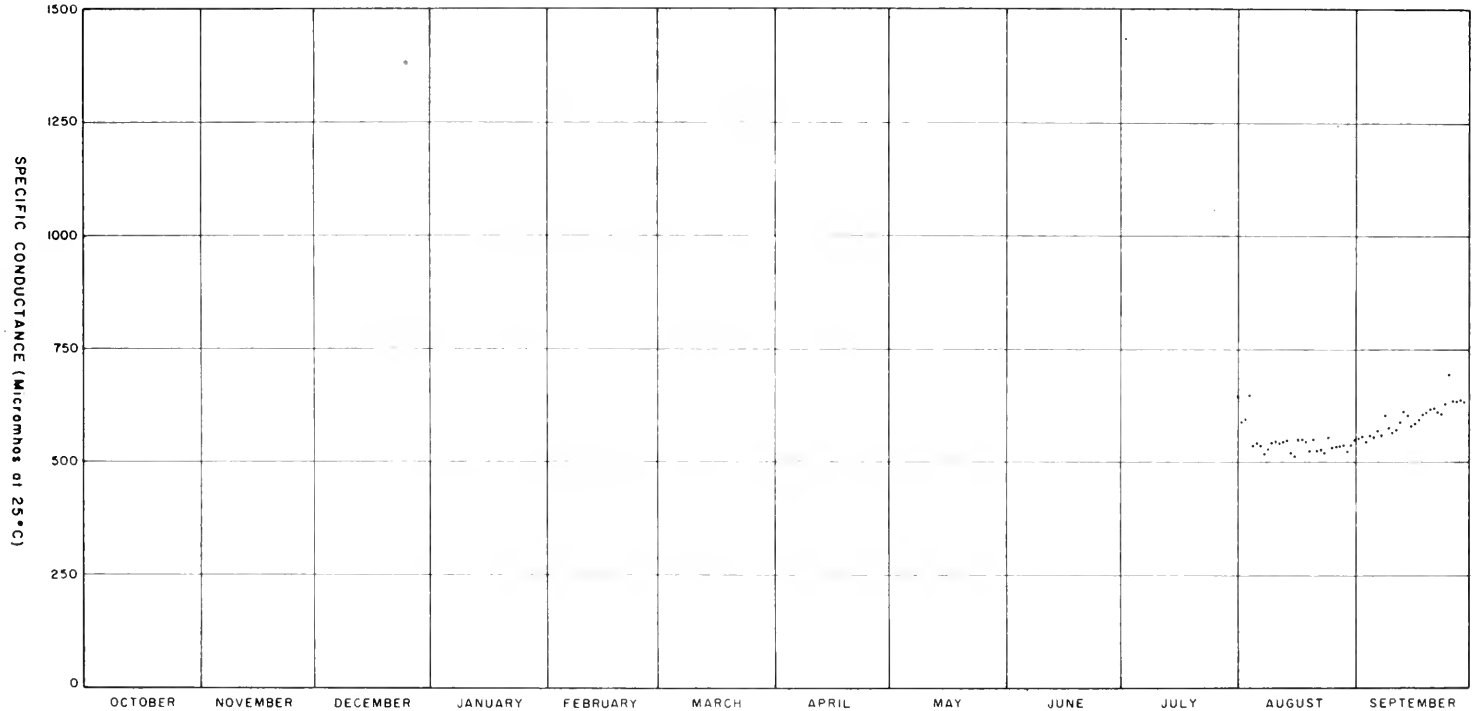
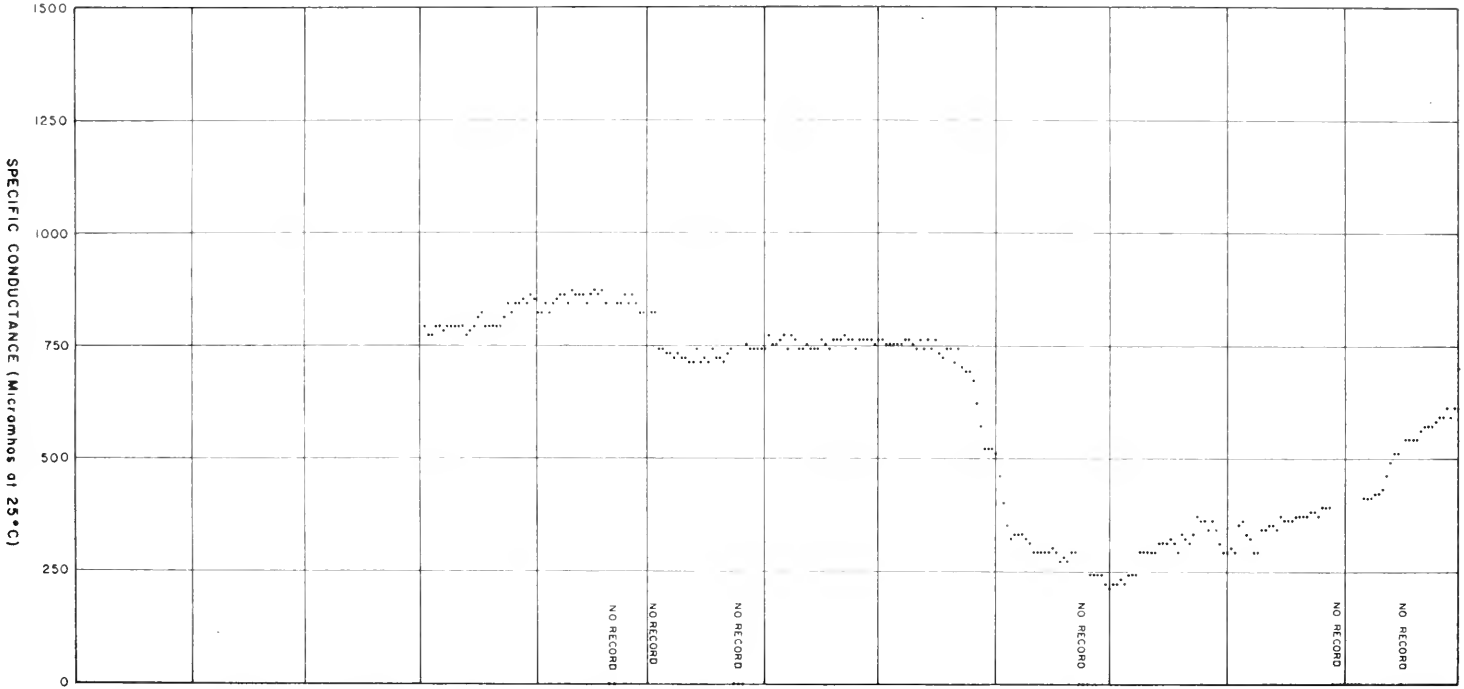
FIGURE D-1



ELECTRICAL CONDUCTANCE
DAILY MEAN
ALAMEDA CREEK NEAR NILES (STA 73)
1963



ELECTRICAL CONDUCTANCE
DAILY READINGS AT 1300 HOURS

BETHANY FOREBAY AT
SOUTH BAY PUMPING PLANT (STA 207)

1963

FIGURE

State of California

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ORGANIZATION OF BULLETIN NO. 130 SERIES

Volume I - NORTH COASTAL AREA

Volume II - NORTHEASTERN CALIFORNIA

Volume III - CENTRAL COASTAL AREA

Volume IV - SAN JOAQUIN VALLEY

Volume V - SOUTHERN CALIFORNIA

Each volume consists of the following:

TEXT and

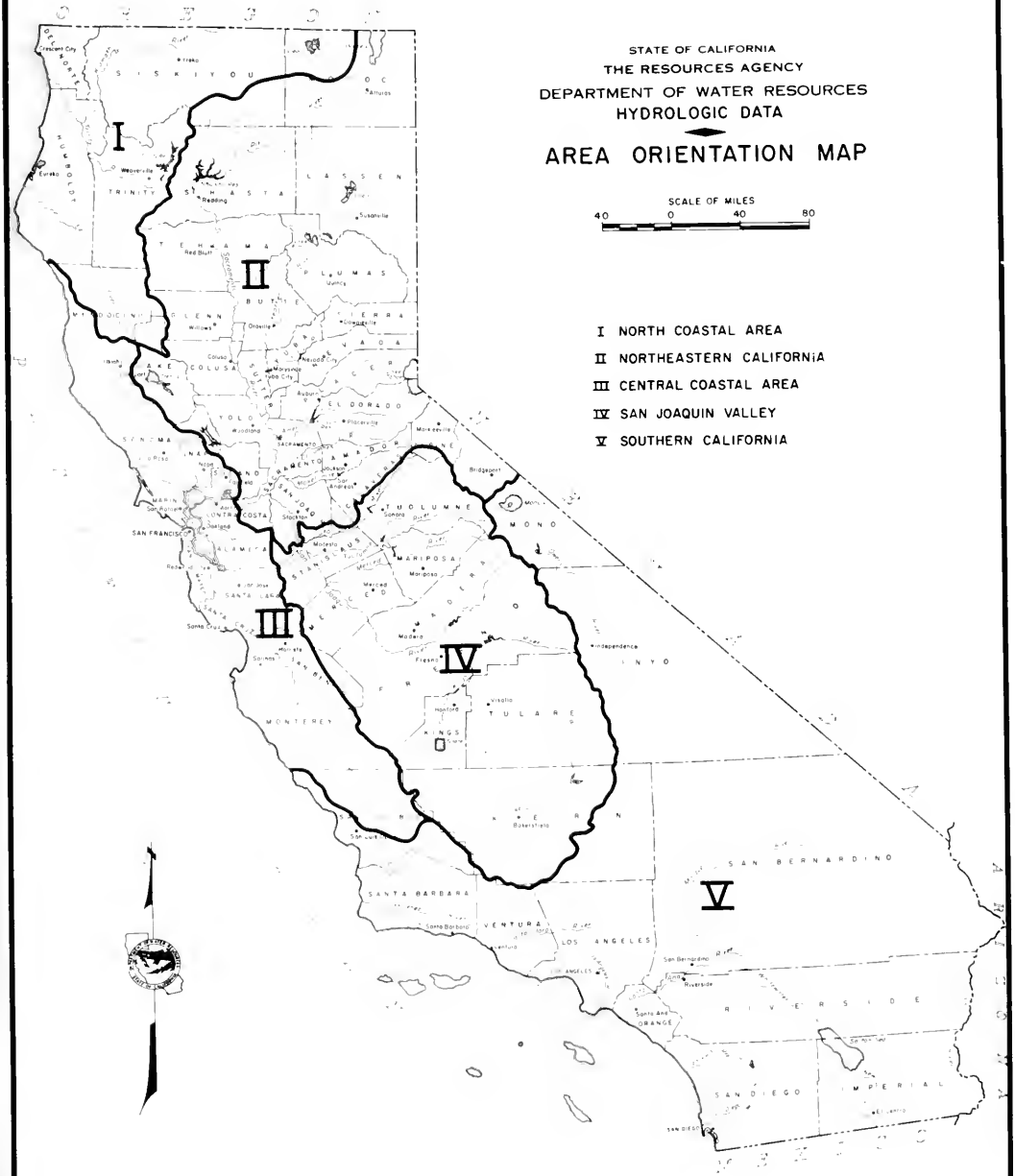
Appendix A - CLIMATE

Appendix B - SURFACE WATER FLOW

Appendix C - GROUND WATER MEASUREMENTS

Appendix D - SURFACE WATER QUALITY

Appendix E - GROUND WATER QUALITY


STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
HYDROLOGIC DATA
AREA ORIENTATION MAP
SCALE OF MILES
40 0 40 80
I NORTH COASTAL AREA
II NORTHEASTERN CALIFORNIA
III CENTRAL COASTAL AREA
IV SAN JOAQUIN VALLEY
V SOUTHERN CALIFORNIA
I
II
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SHASTA
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BUTTE
SIERRA
GLENN
COLUSA
YUBA
SUTTER
NEVADA
PLACER
EL DORADO
YOLO
SACRAMENTO
SAN JOAQUIN
AMADOR
CALAVERAS
TUOLUMNE
MARIPOSA
MONO
INYO
MADERA
FRESNO
TULARE
KINGS
MONTEREY
SAN LUIS OBISPO
SANTA BARBARA
VENTURA
LOS ANGELES
SAN BERNARDINO
RIVERSIDE
ORANGE
SAN DIEGO
IMPERIAL
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ALAMEDA
SANTA CLARA
SANTA CRUZ
SAN MATEO

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OF CALIFORNIA—RESOURCES AGENCY
WILLIAM E. WARNE, *Director*
ARTMENT OF WATER RESOURCES
OX 388
MENTO

June 24, 1965

Honorable Edmund G. Brown, Governor,
and Members of the Legislature of
the State of California

Gentlemen:

The Bulletin No. 130 series of reports incorporates data on surface water, ground water, and climate previously published annually in Bulletins No. 23, 39, 65, 66, and 77. With the inauguration of the new series, publication of the earlier reports is suspended.

Bulletin No. 130 will be published annually in five volumes, each volume to report hydrologic data for one of five specific reporting areas of the State. The area orientation map on page iii delineates these areas. Page ii outlines the organization of the bulletin, its volumes and appendixes.

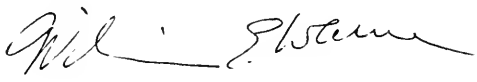
This report is Volume III, "Central Coastal Area". It includes a text which summarizes hydrologic conditions in this part of California during the 1963 water year (October 1, 1962 through September 30, 1963) and five appendixes of detailed hydrologic data: Appendix A, "Climate", Appendix B, "Surface Water Flow", Appendix C, "Ground Water Measurement", Appendix D, "Surface Water Quality", and Appendix E, "Ground Water Quality".

The collection and publication of data such as is contained in Bulletin No. 130 is authorized by Sections 225, 226, 229, 230, 232, 345, 12609, and 12616 of the Water Code of the State of California.

The basic data programs of the Department of Water Resources have been designed to supplement the activities of other agencies, in order to satisfy specific needs of this State. Bulletin No. 130 is designed to present useful, comprehensive, accurate, timely hydrologic data to the public.

Collection of much of the data presented has been possible only because of the generous assistance of other agencies, private organizations and individuals. Without the data supplied by these people, Bulletin No. 130-63 should have been much less the valuable tool it is today.

Sincerely yours,



Director

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

EDMUND G. BROWN, Governor
HUGO D. FISHER, Administrator, The Resources Agency
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Reviewed and coordinated by
Division of Resources Planning
Data Coordination Section

ACKNOWLEDGMENTS

The Department of Water Resources gratefully acknowledges the assistance and contributions of the many public agencies, private organizations, and individuals whose cooperation greatly facilitated the preparation of this bulletin. Special mention is made of the following agencies:

Federal

United States Geological Survey
United States Bureau of Reclamation
United States Weather Bureau
United States Public Health Service

State

California Department of Public Health
California Disaster Office

Local

Alameda County Flood Control and Water Conservation District
Alameda County Water District
Campbell Water Company
Cupertino, City of
Gilroy, City of
Mendocino County
Monterey County Flood Control and Water Conservation District
Mountain View, City of
Napa County
North Los Altos Water Company
Pacheco Pass Water District
Palo Alto, City of
San Benito County
San Jose Water Works
San Luis Obispo County Flood Control and Water Conservation District
Santa Clara, City of
Santa Clara County Flood Control and Water Conservation District
Santa Clara Valley Water Conservation District
Santa Cruz County
Solano County
Sonoma County Flood Control and Water Conservation District
South Santa Clara Valley Water Conservation District
Stanford University
Sunnyvale, City of
Watsonville, City of

CHAPTER I

HYDROLOGIC CONDITIONS, 1962-63

California is an area that is unique in many respects. Its climate has always been exceptional and the range of land forms within the State sets it apart from neighboring areas. California has often been described as being set apart or isolated by features that prevail over wide areas adjoining the State. Perhaps, it would be more appropriate to consider the State as a link between dissimilar regions rather than isolated by them. California does, in fact, span all the dissimilarities of climate and topography from parched Death Valley to the marshy tidelands of the Pacific and the rain forests of northwestern California.

California climate is fostered by a balance between the slow forces of geology and the turbulent storms born of the Pacific Ocean. The massive walls of the Rocky Mountains and the Sierra Nevada protect the State from all but a few thrusts of the dry, cold, polar continental air masses. Maritime air masses, originating far out in the Pacific, receive some impetus and direction from wind patterns of the troposphere and move toward the California Coast. California lies in a transition zone between the prevailing westerlies that blow across the North Pacific and a calm high pressure zone, the horse latitudes, in the vicinity of 30 degrees north latitude. The horse latitudes, just south of California, buffer the State from many tropical storms which originate further to the south so that the north coast of California is crossed by more storms than the south coast. The Sierra Nevada and Cascade Mountains, along the eastern border of the great central valley, receive much of their precipitation by orographic lifting of the maritime air masses. The interior

lands of Southern California are shielded from maritime air masses by the Transverse Ranges and the northerly extension of the Peninsula Range.

California - Statewide

Average values, which sum up annual conditions for the whole State, show the 1962-63 water year to have been about normal. A closer look at this apparent normality shows a series of extreme conditions which in combination resulted in nearly normal averaged values. Figure 1, showing the water year precipitation in percent of normal, indicates that normal annual precipitation amounts were recorded in the latitude of San Luis Obispo and Bakersfield. Recorded annual precipitation south of that latitude was as low as 50 percent of normal in the vicinity of San Diego and north of the latitude rose as high as 150 percent of normal in the mountains along the northern boundary of the State.

During 1962-63, even these annual precipitation values were composed of extremes. In mid-October a series of storms drenched Northern California, Oregon, and Washington. Rivers in Northern California were near the flood level and the Feather River at Oroville reached the highest October stage of record, inundating construction work at the Oroville damsite. Southern California stayed dry. A midwinter drought followed, setting new records for lack of precipitation and for continuous days of fog in the Central Valley. Again, Southern California was dry.

The drought was broken by a three-day downpour at the end of January. Flood conditions prevailed again in Northern California and some areas, particularly the upper Yuba River basin, suffered from serious floods. Much of Southern California received moderate amounts of rain at this time.

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER YEAR PRECIPITATION
IN PERCENT OF NORMAL
OCTOBER 1, 962 – SEPTEMBER 30, 963

During April, Northern California was covered by a series of storms; precipitation was moderate, but continued for almost two weeks. The April precipitation, along with a record late season snowfall during May, largely in the Northern Sierras, built up snowpacks and assured a normal water supply during the summer. Southern California gained some precipitation but had a less than normal wet season, which extended the dry trend that has prevailed in the southern part of the State since 1944.

Understandably, other hydrologic features showed abnormal responses. Streamflows alternated between extreme highs and extreme lows, but were about normal during the summer. With the recurring threat of floods, operation of reservoirs was difficult, yet the amount of water stored in reservoirs at the end of the water year was greater than year-end storage during most preceding years. In Southern California both surface runoff and reservoir storage were below normal.

Ground water conditions followed the pattern of precipitation. In the northern part of the State, the amount of water stored in the ground water basins generally increased. Because of the time distribution of precipitation, the increase of stored ground water was less than it would have been if the distribution was more uniform. Throughout Southern California, where precipitation was well below normal, ground water levels continued to drop.

Central Coastal Area

The Central Coastal Area, as delineated on the "Area Orientation Map", (frontispiece) includes all or parts of 14 counties extending from San Luis Obispo County on the south to Mendocino County on the north. Nearly half of the State's 1,190-mile open coastline is within the report area. It embraces

the major portion of the Coast Ranges, which consists of a series of mountain ranges paralleling the coast separated by many fertile valleys. The San Francisco Bay system is a central and unique feature.

Within the area is the metropolitan complex known as the Bay area. The Bay area is the second largest metropolitan area in the western half of the United States.

Surface water in the southern and central portions of the Central Coastal Area is highly developed. Extensive use is made of the numerous complex ground water basins and surface water is imported to the area. Several local ground water basins are deliberately recharged with stored or imported surface water. The basins are highly important to local economies and to the economy of the State. Consequently, ground water is emphasized in this bulletin.

In the Central Coastal Area average annual precipitation varies from areas of abundant rainfall along the coast and in the region north of San Francisco (up to 80 inches) to areas of very little rainfall in the southern Salinas River Valley (as low as 10 inches). During the 1962-63 season, which was noteworthy for its excesses in wet and dry periods, the final average result was an above normal precipitation for the report area with some areas recording 160 percent of normal.

The quality of surface waters in the report area is mostly good with the best waters draining the mountains adjacent to the coast. During the 1962-63 season the concentrations of dissolved solids generally decreased because of above normal precipitation and the corresponding increase in runoff.

Ground water occurs under diverse conditions and in a variety of rock types. Most of the readily available water exists in subsurface reservoirs composed of unconsolidated alluvial materials which underlie intermontane

valley floor areas. In many areas, the unconsolidated alluvial deposits are underlain and bordered by relatively extensive deposits of older, more consolidated alluvial materials which are also water bearing and act as recharge areas for the ground water reservoirs. Materials of lesser importance with respect to production of ground water in the Central Coastal Area but often of local significance are: The sedimentary materials which were deposited in lakes, lagoons, or as sand dunes; shallow water marine sediments from which sea water has been flushed; and some types of volcanic rocks. The ground waters are good to excellent in mineral quality and are suitable for most beneficial uses, except in localized areas where waters contain high concentrations of one or more of the following minerals: chlorides, sulfates, nitrates, sodium, and boron. The ground waters are bicarbonate and vary from moderately hard to very hard. Depths to water in wells range from about 350 feet to "flowing".

The raw ground water level data are made more meaningful when summarized into basin averages. Table 1, "Ground Water Level Conditions in the Central Coastal Area", presents average depths to ground waters and average changes by basin and region from the spring of 1962 to the spring of 1963.

During the spring of 1963 average depths to water in the monitored basins ranged from about 4.5 feet in Alexander Valley to about 123 feet in the Santa Clara Valley. The overall average depth to water in the basins monitored was 50.6 feet which was a decrease of 2.7 feet from the 1962 average. Significant rises of 23.4 feet and 2.0 feet occurred in the South Santa Clara County and San Benito County units of Gilroy-Hollister Valley, respectively. These rises were reversals of downward trends of the previous three years during which water levels had dropped approximately 39 feet in South Santa Clara

TABLE 1
GROUND WATER LEVEL CONDITIONS
IN THE CENTRAL COASTAL AREA
SPRING 1963

Ground Water Basin or Unit	Basin Number	Average Change in Ground Water Level 1/ Spring 1962 to Spring 1963 (in feet)	Average Depth to Ground Water Spring 1963 (in feet)
		Region 1	
Potter Valley	1-14.00	0.0	6.6
Ukiah Valley	1-15.00	-1.1	5.7
Sanel Valley	1-16.00	-0.6	5.3
Alexander Valley	1-17.00	+0.6	4.5
Santa Rosa Valley	1-18.00		
Santa Rosa Area	1-18.01	+2.3	13.0
Healdsburg Area	1-18.02	-0.2	12.5
Lower Russian River Valley	1-98.00	-2.4	9.4
	Region 1 Averages: 2/	-0.6	9.6
		Region 2	
Petaluma Valley	2-1.00	+1.3	23.2
Napa-Sonoma Valley	2-2.00		
Napa Valley	2-2.01	+0.9	12.0
Sonoma Valley	2-2.02	+1.1	16.5
Suisun-Fairfield Valley	2-3.00	+5.3	6.8
Ygnacio Valley	2-6.00	+1.1	15.1
Santa Clara Valley	2-9.00		
East Bay Area	2-9.01	+2.6	59.3
South Bay Area	2-9.02	+12.6	123.2
Livermore Valley	2-10.00	+3.3	63.5
Half Moon Bay Terrace	2-22.00	+3.4	18.7
San Gregorio Valley	2-24.00	-0.6	9.1
Pescadero Valley	2-26.00	+1.4	6.1
	Region 2 Averages: 2/	+5.5	53.3
		Region 3	
Soquel Valley	3-1.00	-0.8	65.6
Pajaro Valley	3-2.00	+2.2	60.7
Gilroy-Hollister Valley	3-3.00		
South Santa Clara County	3-3.01	+23.4	47.3
San Benito County	3-3.02	+2.0	76.9
Salinas Valley	3-4.00	+0.1	55.2
Carmel Valley	3-7.00	+0.7	16.3
West Santa Cruz Terrace	3-26.00	No measurements in 1963	
	Region 3 Averages: 2/	+1.5	56.9
	Central Coastal Area Averages: 3/	+2.7	50.6

1/ + indicates rise in water level.
- indicates decline in water level.

2/ Region Averages = $\frac{\Sigma \text{ (basin average x basin area)}}{\Sigma \text{ basin areas}}$

3/ Central Coastal Area Averages = $\frac{\Sigma \text{ (region average x region area)}}{\Sigma \text{ region areas}}$

County and 9 feet in San Benito County. Sea-water intrusion continued to be a problem in portions of Salinas and Pajaro Valleys and in the Niles Cone in Alameda County where ground water levels have remained below sea level.

During the period from July 1, 1962 through June 30, 1963, there were no significant changes in mineral concentrations. Some localized poor quality ground water, probably from deep-seated origin, is found in the northern portion of the Central Coastal Area. Data collected in portions of Petaluma Valley, Napa-Sonoma Valley and Suisun-Fairfield Valley, where ground water has been degraded by brackish waters from the bays, indicate no further degradation. Chloride concentrations in the Centerville aquifer in Alameda County decreased (Plate 6). This decrease was probably a direct result of above normal precipitation and deliberate recharge of the ground water basin with South Bay Aqueduct water by Alameda County Water District.

Boron concentrations in excess of that recommended for irrigation of some crops were present in water from some wells in the following areas:

1. The vicinity of Newark in Alameda County and the proximity of the Mission fault.
2. Southern and central portions of Petaluma Valley adjacent to Petaluma Creek.
3. East side of Napa Valley.
4. Eastern portion of Santa Clara Valley, especially in the Penitencia Creek area.
5. Northern and eastern portions of Livermore Valley.
6. Eastern portion of Hollister Valley.

A number of wells drilled into the volcanic rocks on the east side of Napa Valley produce highly mineralized water, or water having undesirable

taste or odor. High nitrate concentrations occur in localized areas in Livermore Valley. Many wells in Clayton and Ygnacio Valleys yield water which, unless softened, is undesirable for domestic and some industrial uses because of extreme hardness. Some of the wells in Ygnacio Valley also yield water having concentrations of sulfates and nitrates exceeding amounts normally recommended as limits for drinking water.

Ground water samples collected in the sea-water intruded areas of Pajaro and Salinas Valleys contained about the same chloride concentrations as the samples collected the previous year. Water with nitrate concentrations above the normally recommended limit for drinking water is present in a few wells located near Monterey Bay in Pajaro Valley. Wells in the vicinity of Hollister yield water containing high concentrations of total dissolved solids, chlorides, sulfates, nitrates, and boron.

CHAPTER II

DATA COLLECTION ACTIVITIES

The Department of Water Resources, in cooperation with federal, state, and local agencies, as well as with the generous and public-spirited assistance of many individuals, has gradually developed a continuing program of basic hydrologic data collection. This continuity enables systematic and orderly handling, filing, and publication of the data for all uses both now and in the future.

The data collection activities involve the maintenance of a network of stations adequate to provide reliable, meaningful, representative and needed information. Water samples or water measurements are taken at these stations, chemical analyses of the samples are made, and the data are compiled, analyzed, summarized, and published. These data include information on climate, surface water flows, tidal stages, ground water levels, and on the chemical quality of surface and ground waters. The climate data include precipitation, air temperature, wind movement, and evaporation.

CLIMATE

The climatology station network shown on Plate 7, "Climatological Stations in the Central Coastal Area", was established by the U. S. Weather Bureau and the Department of Water Resources. The Department supplements the Weather Bureau network of 141 stations with a network of 74 selected stations which are and have been operated by individuals, private industry, and governmental agencies. Data from these 215 stations are tabulated in Appendix A of this report.

SURFACE WATER FLOW

The four surface water stations shown on Plate 1 are operated by the Department of Water Resources. The Department also cooperates with the United States Geological Survey in the operation of 62 of the 115 stations operated by that agency in the area covered by this report. Also, the United States Coast and Geodetic Survey operates two tide stations in the area. The United States Geological Survey publishes data from the 115 stations in its water supply papers. There are a number of surface water stations operated by local agencies for local purposes from which data are not routinely obtained by the Department.

GROUND WATER MEASUREMENT

The Department cooperates with the U. S. Geological Survey and many local agencies for the systematic observation of ground water levels. Wells at which water level measurements are made in the Central Coastal Area number approximately 1,700 of which 213 are presented in Appendix C of this report. These 213 wells were selected as representative of wells in the respective ground water basins or units. The wells were selected on the basis of a number of factors such as, geographical density of one or two wells per township; length of water level record; frequency of measurements; conformity with respect to water level fluctuations in the ground water basin or area, aquifer represented; and availability of a geologic log, mineral analyses, and production records.

The depth to water in most wells is usually a direct measurement made with a tape; however, in some wells, especially deep ones, measurements are made

with an air line and gauge or an electric sounder. Field work was performed by local cooperators, the U. S. Geological Survey, and department personnel. The Department has full responsibility for reviewing, editing, processing, and publishing ground water level data. An electronic computer program has been developed to perform a part of the processing and tabulating.

Ground water basins or units in the Central Coastal Area are shown on Plate 2. The number of wells measured in these areas and the measuring agency are shown in Table 2.

Water level fluctuations are depicted graphically on hydrographs of 22 wells distributed among significant basins of the Area. These wells were selected insofar as possible as representative of their respective basins or units. The hydrographs are presented in Plates 3 through 5 by region, basin, and well number.

Maps showing lines of equal elevation of water in wells in Napa Valley, Suisun-Fairfield Valley, Livermore Valley, Santa Clara Valley (East Bay and South Bay Areas), Gilroy-Hollister Valley (South Santa Clara and San Benito Counties), Salinas Valley and Pajaro Valley are prepared regularly. These maps are on file with the Department.

SURFACE WATER QUALITY

Surface water was sampled and analyzed both by the Department of Water Resources and by the U. S. Geological Survey in cooperation with the Department. The data from these sampling activities are shown in Appendix D of this report. The appendix includes data from a network of basic monitoring stations, operational stations on the South Bay Aqueduct, and investigational stations. It includes all of the surface water quality data collected by this

TABLE 2
SUMMARY OF GROUND WATER DATA
COLLECTED IN THE CENTRAL COASTAL AREA
July 1, 1962 - June 30, 1963

Ground Water Basin or Unit	Basin Number	Measuring or Sampling Agency	Number of Wells Measured	Number of Wells Sampled
		REGION 1		
Potter Valley	1-14.00	U. S. Geological Survey	2	
Ukiah Valley	1-15.00	U. S. Geological Survey	3	
		Mendocino County		10
Sanel Valley	1-16.00	U. S. Geological Survey	3	
		Mendocino County		6
Alexander Valley	1-17.00	U. S. Geological Survey	6	
		Department of Water Resources		6
Santa Rosa Valley	1-18.00			
Santa Rosa Area	1-18.01	U. S. Geological Survey	3	
		Department of Water Resources	7	20
	1-18.02	U. S. Geological Survey	4	
		Department of Water Resources		3
Lower Russian River Valley	1-98.00	U. S. Geological Survey	3	
		REGION 2		
Petaluma Valley	2-1.00	U. S. Geological Survey	3	
		Sonoma County F. C. & W. C. D.		17
		Department of Water Resources	3	9
Napa-Sonoma Valley	2-2.00			
Napa Valley	2-2.01	U. S. Geological Survey	4	
		Napa County	108	
		Department of Water Resources		27
Sonoma Valley	2-2.02	U. S. Geological Survey	2	
		Sonoma County F. C. & W. C. D.		14
		Department of Water Resources	2	
Suisun-Fairfield Valley	2-3.00	U. S. Geological Survey	3	
		Solano County	23	
		Department of Water Resources	4	15
Pittsburg Plain	2-4.00	Department of Water Resources		3
Clayton Valley	2-5.00	Department of Water Resources		8
Ygnacio Valley	2-6.00	Department of Water Resources	5	7
Santa Clara Valley	2-9.00			
East Bay Area	2-9.01	Alameda County Water District	105	46
		Alameda County F. C. & W. C. D.	88 1/	24
		Department of Water Resources	3	
South Bay Area	2-9.02	U. S. Geological Survey	3	
		Santa Clara Valley W. C. D.	250	20
Livermore Valley	2-10.00	Alameda County F. C. & W. C. D.	160	30
Half Moon Bay Terrace	2-22.00	Department of Water Resources	9	
San Gregorio Valley	2-24.00	Department of Water Resources	5	
Pescadero Valley	2-26.00	Department of Water Resources	7	
		REGION 3		
West Santa Cruz Terrace	3-26.00	Santa Cruz County	7	
Soquel Valley	3-1.00	Santa Cruz County	5	
		Department of Water Resources	2	
Pajaro Valley	3-2.00	Monterey County F. C. & W. C. D.	25	14
		Santa Cruz County	50	
		City of Watsonville	6	
		Department of Water Resources	13	17
Gilroy-Hollister Valley	3-3.00			
South Santa Clara County	3-3.01	South Santa Clara County W. C. D.	25	
		Santa Clara Valley W. C. D.	16	
		Department of Water Resources	17	11
		City of Gilroy	4	
San Benito County	3-3.02	Pacheco Pass Water District and San Benito County	90	
		Department of Water Resources	3	14
Salinas Valley	3-4.00	Monterey County F. C. & W. C. D.	393	70
		San Luis Obispo County	51	6
Carmel Valley	3-7.00	Monterey County F. C. & W. C. D.	33	5

1/ An additional 110 wells were measured during spring 1963.

Department in the Central Coastal Area, except for data from investigational stations in the San Francisco Bay system below Antioch. The excluded data are specialized in nature and beyond the scope of this report. The stations for which data are reported in Appendix D are shown on Plate 1.

GROUND WATER QUALITY

During the year from July 1, 1962 through June 30, 1963, ground water samples were collected from 393 wells in the Central Coastal Area. These wells or stations were selected by the Department in the areas shown on Plate 2. Table 2 indicates the number of wells sampled in each basin and the sampling agency. The data from these stations are tabulated in Appendix E.

Ground water is sampled and analyzed to provide information on the quality characteristics, to identify problem areas, to determine the quality trends, and if possible, to identify the factors that control or affect the quality. Analyses made of ground water include mineral and radiological determinations. The frequency of sampling, types of analyses, and density of the station network depend largely on conditions in the monitored area.

APPENDIX A

CLIMATE

CLIMATOLOGIC DATA

This appendix contains station index, seasonal precipitation, monthly temperatures, and monthly evaporation tables. The data compiled are provided by governmental agencies, private industry and individuals. Symbols and abbreviations used in this appendix are:

C	Data from recorder stations.
D	Data unavailable for this report.
E	Evaporation.
e	Wholly or partially estimated.
M	All or part of record missing. When used in place of an average monthly temperature value, more than 10 days of record are missing.
NR	No record.
P	Precipitation.
RB	Beginning of record.
SS	Observation at sunset.
T	Temperature.
T	Trace, an amount too small to measure.
V	Observation time varied.

Climatological Station Index

Table A-1 includes the station name, number, and the county in which each station is located. The letter and first digit of the station number represent hydrographic area and unit. The remaining digits are assigned in accordance with alphabetic sequence. It also includes the observer's name, station location, and elevation of the station. The time of observation, beginning of record, and cooperator number complete the information on this

table. The cooperator number indicates the source of the data. The cooperator numbers assigned are as follows:

000 Private Cooperator

403 Sonoma County Flood Control and Water Conservation District

407 San Benito County

411 Marin County

413 Marin Municipal Water District

414 Santa Clara Valley Water Conservation District

418 Vallejo Water Department

426 Santa Clara County Flood Control and Water Conservation District

801 Pomology Department, U. C., Davis

804 State Department of Beaches and Parks

806 State Department of Water Resources

808 State Division of Forestry

809 State Division of Highways

900 U. S. Weather Bureau

901 Corps of Engineers, San Francisco District

902 U. S. Air Force

907 State Climatologist (unpublished USWB)

909 U. S. Soil Conservation Service

Seasonal Precipitation

Table A-2 presents total monthly and annual precipitation in inches for the year from July 1, 1962 through June 30, 1963.

Monthly Temperatures

Table A-3 covers the same period and includes the maximum and minimum temperatures, the average of the daily maximum temperatures, the average of the daily minimum temperatures, and the average of the daily maximum and minimum temperatures recorded during the month. The temperatures are recorded in degrees Fahrenheit.

Monthly Evaporation

Table A-4 presents total evaporation during each month in inches, total wind movement during the month in miles, the monthly average of daily maximum and minimum water temperatures, monthly precipitation, the maximum air temperature, the minimum air temperature, the average minimum air temperature, and the average of the daily maximum and minimum air temperatures. Portions of these data are repetitions of data in Tables A-2 and A-3. These data are included herein because of their close connection with evaporation data.

TABLE A-1

CLIMATOLOGICAL STATION INDEX

STATION NAME	STA NUMBER	COUNTY	OBSERVER	LATITUDE ° ' "	LONGITUDE ° ' "	ELEV IN FEET	TOWNSHIP	RANGE	SECTION	40 ACRE TRACT	TIME OF OBSERVATION P	T	E	RECORD BEGAN	COOP. NO
Alamitos Perc. Pond	E6 0053	Santa Clara	SCVWCD	37 15 18	145 52 18	200	8S	1E	9	P	9A	9A	9A	1959	426
Alamo 1N	E4 0064	Contra Costa	Cuzzello	37 52	122 01	410	1S	2W	1	Q	7A	7A		1957	900
Almaden Reservoir	E6 0125	Santa Clara	SCVWCD	37 10 00	121 50 00	640	9S	1E	11	E	8A			1936	426
Angwin Psc. Union Col.	E3 0212	Napa	Pacific Union Col.	38 34 18	122 26 12	1815	8N	5W	5	Q	8P	8P		1939	900
Arroyo Seco	D2 0322	Monterey	R. Billings	36 14	121 29	800	19S	4E	36		C			1931	900
Atascadero HMS	D3 0360-01	San Luis Obispo	J. Ellis	35 27 30	120 38 24	940	28S	12E	26		8A	8A		1948	809
Atlas Road	E3 0372	Napa	G. Dutra	38 25	122 15	1735	7N	4W	25		C			1940	900
Ben Lomond	00 0674	Santa Cruz	N. Shew	37 05	122 06	504	10S	2W	9		5P	5P		1937	900
Berkeley	E4 0693	Alameda	U. of Calif.	37 52	122 15	299	1S	3W			C	8P		1887	900
Berryessa 1E (Toyoo Ave.)	E6 0706	Santa Clara	H. Mitchell	37 23	121 50	205	6S	1E	23	P	5P			1921	901
Big Sur State Park	D4 0790	Monterey	Park Ser.	36 15	121 47	240	19S	2E	30		8A			1914	900
Black Mountain 2 SW	E6 0850	Santa Clara	M. Incerpi	37 18	122 10	2330	7S	3W	36		9A			1943	900
Blakes Landing	F9 0876	Marin	H. Angress	38 11 42	122 55 00	40	4N	10W	13		8A			1956	000
Boonville HMS	F8 0973	Mendocino	Div. of Highways	39 01	123 22	342	13N	14W	2		8A			1936	900
Boonville-Farrar	F8 0973-02	Mendocino	J. Farrer	39 00 45	123 22 10	395	13N	14W	2		9A			1951	901
Boonville-Bell Valley	F8 0973-04	Mendocino	E. Mathison	39 01 30	123 17 30	1580	14N	13W	33		5P			1960	000
Bouchers Gap	D4 0998-27	Monterey	B. Alexander	36 21	121 51	2050	18S	1E	24	P	8A			1960	000
Bradley	03 1034	Monterey	Div. of Forestry	35 52	120 48	540	24S	11E	8		8A			1946	900
Buena Vista	D1 1170	San Benito	A. Churchill	36 46	121 11	1640	13S	7E	27	K	C			1932	900
Burlingame	E7 1206	San Mateo	Burlingame	37 35	122 21	10	4S	5W			4P	4P	4P	1946	900
Burton Ranch	E4 1216	Contra Costa	R. Stirton	37 52	122 05	530	1S	2W	9	M	8A			1955	900
Buzzard Lagoon	D1 1247	Santa Cruz	D. Nohrden	37 02	121 50	1275	10S	1E	26	N	6P			1959	000
Calaveras Reservoir	E5 1281	Alameda	O. McCarthy	37 29 12	121 49 06	805	5S	1E	24		7A			1874	900
Calero Reservoir	E6 1285	Santa Clara	SCVWCD	37 10 48	121 45 48	500	9S	2E	4	E	8A			1958	414
Calistoga	E3 1312	Napa	J. Schou	38 35	122 35	365	9N	7W	36		7A			1873	900
Cambrian Park	E6 1341-10	Santa Clara	SCVWCD	37 15 12	121 55 24	225	8S	1W	12	B	7A			1962	414
Campbell Water Co	E6 1377-01	Santa Clara	Campbell Water Co.	37 17	121 57	192	7S	1W	35	C	5P			1897	000
Carmel Valley	D4 1534	Monterey	A. Collins	36 29	121 44	425	17S	2E	5		5P	5P		1957	900
Carzadero	F9 1602	Sonoma	H. Borotra	38 32	123 07	1040	8N	12W	13		5P			1939	900
Chittenden Pass	01 1739	San Benito	V. Haskin	36 54	121 36	125	12S	3E	12		8A			1945	900
Chittenden	D1 1739-01	Santa Cruz	H. Chadwell	36 54 08	121 36 17	104	12S	3E	11	K	8A			1960	000
Cienaga	D1 1766	San Benito	A. Smith	36 42 54	121 20 48	900	14S	6E	18	B	8A			1950	407
Cloverdale 3 SSE	F9 1838	Sonoma	J. Byrd	38 46	122 59	320	11N	10W	29		8A	8A		1950	900
Cloverdale 11 W	F9 1840	Sonoma	F. Orobaun	38 46	123 13	1820	11N	12W	17		C			1939	900
Concord 3 E	E4 1962	Contra Costa	H. Lee	37 58	121 59	200	1N	1W			8A			1954	900
Conn	E3 1976	Napa	City of Napa	38 28 50	122 22 30	225	7N	5W	1	N	8A			D	000
Coyote Dam-Lake Mendocino	F9 2105	Mendocino	C.O.E.	39 11	123 11	784	16N	12W	34		8A	8A	8A	1960	901
Coyote Reservoir	E6 2109	Santa Clara	SCVWCD	37 05 06	121 32 24	800	10S	4E	9	C	9A	9A	9A	1938	900
Crest Ranch	D0 2159	Santa Cruz	N. Nielson	37 05 06	122 08 00	2640	10S	3W	1	K	8A			1948	000
Crockett	E4 2177	Contra Costa	C & H Sugar	38 02	122 13	12	3N	3W	32		8A	8A		1918	900
Davenport	00 2290	Santa Cruz	F. Tacke	37 01	122 12	273	10S	3W	32	Q	8A	8A		1910	900
Del Monte	D2 2362	Monterey	USN School	36 36	121 52	46	15S	1E			C			1911	900
Duttons Landing	E3 2580	Napa	O. Steele	38 12	122 18	20	4N	4W	10		8A	8A	8A	1955	900
Evergreen-Silver Ck. Rd.	E6 2919	Santa Clara	R. Long	37 19	122 02	340	7S	2E	20	G	7A			D	000
Fairfield	E3 2933	Solano	Co. Surveyor	38 15	122 03	15	5N	2W	25		C			1940	900
Fairfield Police Station	E3 2934	Solano	Police Dept.	38 15	122 03	19	5N	2W	26		4P	4P		1951	900
Fort Bragg	F8 3161	Mendocino	Cal. West. RR	39 27	123 48	80	18N	17W	7		8A	8A		1895	900
Fort Bragg Aviation	F8 3164	Mendocino	WB Observer	39 24	123 49	61	18N	18W	25		11P	11P		1940	900
Fort Ross	F8 3191	Sonoma	C. Call	38 21	123 15	116	8N	12W	30	D	6P	6P		1874	900
Freedom 8 NNW	D1 3232	Santa Cruz	Westminster	37 03	121 49	1495	10S	1E	24		C			1952	900
Fremont Pk. State Park	D1 3238-01	San Benito	L. Beauvenue	36 46 18	121 28 54	2500	13S	4E	35		8A	8A		1950	901
Gerber Ranch	E5 3387	Santa Clara	F. Gerber	37 22 00	121 29 12	2140	6S	4E	36	P	8A			1912	900
Gilroy	01 3417	Santa Clara	Fire Dist.	37 00	121 34	194	11S	4E	6		8A	9A		1957	900
Gilroy 8 NE	01 3419	Santa Clara	W. Kickham	37 02	121 26	1050	10S	5E	2B		C			1942	900
Gilroy 14 ENE	01 3422	Santa Clara	S. Auger	37 06	121 20	1350	10S	6E	5		8A			1940	900
Gonzales 9 ENE	D2 3502	San Benito	A. Bogue	36 33	121 18	2350	16S	6E	15		C			1943	900
Graton	F9 3577	Sonoma	L. Hallberg	38 25 54	122 51 48	200	7N	9W	21		7A	7A		1928	000
Graton 1 W	F9 3578	Sonoma	H. Parnell	38 26	122 53	210	7N	9W	22		6P	6P		1896	900
Green Valley	E3 3612-01	Solano	E. Marshall	38 17	122 10	414	5N	3W	3		8A			1893	418
Guadalupe Reservoir	E6 3681	Santa Clara	SCVWCD	37 12	121 53	450	8S	1E	29	Q	8A			1936	414
Guerneville	F9 3683	Sonoma	J. Buttner	38 30	123 00	115	8N	10W	25		8A			1939	900
Half Moon Bay 2 NNW	E8 3714	San Mateo	Dept. Agr.	37 29	122 27	60	9S	5W	19		7A	7A		1939	900
Hamilton AFB	E2 3734	Marin	Air Force	38 04	122 31	-2	3N	6W			C	C		1934	900
Hayward 6 ESE	E4 3863	Alameda	M. Oreonan	37 39	121 58	925	3S	1W	28		C			1940	900
Healdsburg	F9 3875	Sonoma	Fire Dept.	38 37	122 50	101	9N	9W	19		6P	6P		1877	900
Healdsburg 2 E	F9 3878	Sonoma	W. Iverson	38 37	122 50	102	9N	9W			8A			1943	900
Hernander 7 SE	01 3928	San Benito	C. Akers	36 18	120 42	2765	19S	12E	6		C			1940	900
Hollister	01 4022	San Benito	Hollister	36 51	121 24	285	12S	5E			5P	5P		1874	900
Hollister Coets	01 4022-10	San Benito	DWR - L & WU	36 55 15	121 26 46	170	11S	5E	32	F	V		V	1962	806
Hollister No. 2	01 4025	San Benito	Hollister	36 51	121 24	284	12S	5E			C			1938	900
Hollister 10 ENE	01 4035	San Benito	E. Hubbell	36 55	121 14	3000	12S	7E	5		C			D	900
Hopland Largo Station	F9 4100	Mendocino	C. Crawford	39 01	123 07	550	13N	12W			8A			1948	900
Inverness-Mery	F9 4277	Marin	M. Mery	38 05 24	122 51 06	150	3N	9W			12N	5P		1951	000
Kellogg	F9 4480	Sonoma	E. Rubinow	38 40	122 40	1800	9N	7W	9		8A			1936	900
Kentfield	E2 4500	Marin	H. Muller	37 57	122 33	90	1N	6W	8		9A	9A		1888	900

TABLE A-1

CLIMATOLOGICAL STATION INDEX

STATION NAME	STA NUMBER	COUNTY	OBSERVER	LATITUDE ° ' "	LONGITUDE ° ' "	ELEV IN FEET	TOWNSHIP	RANGE	SECTION	40 ACRE TRACT	TIME OF OBSERVATION F	T	E	RECORD BEGAN	COOP. NO
King City	D2 4555	Monterey	Div. of Forestry	36 12	121 08	320	20S	8W	18		5P	5P		1887	900
Lafeyette 2 NNE	E4 4633	Contra Costa	R. Sanborn	37 55	122 06	540	1N	2W			8A			1956	900
Lagunitas Lake	F9 4652	Marin	MMWD	37 56 48	122 35 42	785	1N	7W			C			1881	413
La Honde	E8 4660	San Mateo	J. Allen	37 19	122 16	670	7S	4W	14		6P			1950	900
Lake Curry	E3 4677	Soleno	J. Lynch	38 21 18	122 07 18	396	6N	2W	19		8A			1926	418
Leroy Anderson Dam	E6 4916	Santa Clara	SCVWCD	37 09 48	121 37 48	700	9S	3E	10	K	8A			1950	414
Lexington Reservoir	E6 4922	Sante Clara	SCVWCD	37 10 36	121 59 18	700	9S	1W	5	J	8A	8A	8A	1951	414
Linn Ranch	D3 4963	San Luis Obispo	O. Linn	35 41 06	120 43 24	870	26S	12E	7	P	5P	5P		1925	000
Livermore Sewage Plent	E5 4996	Alameda	Livermore	37 41 28	121 48 20	405	3S	1E	12	A	7A	7A	7A	1961	000
Livermore 2 SSW	E5 4997	Alameda	M. Quaterman	37 39	121 47	545	3S	2E	20		7A	7A		1871	900
Lockwood 2 N	D3 5017	Monterey	A. Wzferling	35 58	121 05	1104	22S	8E	34		8A			1940	900
Los Burros	D5 5120-03	Monterey	D. Krenkel	35 52 42	121 23 30	2673	24S	5E	2		8A			1957	000
Los Gatos	E6 5123	Santa Clara	Los Gatos	37 14	121 57	428	8S	1W	21	F	5P	5P		1885	900
Los Gatos-Old Orchard Rd.	E6 5123-04	Santa Clara	S. Koll	37 14	121 55	285	8S	1W	23		7A			1963	414
Los Gatos 4 SW	00 5125	Santa Clara	I. Miller	37 11	122 02	2215	9S	2W	1		9A			1957	900
Mare Island	E3 5333	Soleno	W. Cavanaugh	38 06 00	122 16 12	52	3N	3W			C	C		1867	900
Martinez 3 S	E4 5371	Contra Costa	M. Plummer	37 58	122 08	225	2N	2W			C			1941	900
Martinez 3 SSE	E4 5372	Contra Costa	C. Weaver	37 58	122 06	280	2N	2W			8A			1956	900
Martinez Fire Station	E4 5377	Contra Costa	Fire Dept.	38 01	122 08	26	2N	2W			9A	9A		1891	900
Mill Valley	E2 5647	Mario	County Engr.	37 53 48	122 31 36	10	1N	6W	31		8A			1944	411
Monterey	D4 5795	Monterey	R. Johnson	36 36	121 54	335	15S	1E			SS	SS		1878	900
Morgan Hill 2 E	E6 5844	Sante Clara	T. Downer	37 08	121 37	225	9S	3E			8A			1943	900
Morgan Hill 6 WNW	E6 5846	Sante Clara	M. Ross	37 09	121 46	660	9S	1E			C			D	900
Morgan Hill SCS	D1 5853	Santa Clara	Cons. Ser.	37 08	121 39	350	9S	3E	28		C			1945	900
Morro Bay 3 N	D6 5869	San Luis Obispo	Std. Oil Co.	35 25	120 51	670	29S	10E	12		C			1959	900
Mt. Diablo North Cete	E4 5915	Contra Costa	Bch. & Pks.	37 52	121 56	2100	1S	1W	12		7A	7A		1952	900
Mt. Hamilton	E5 5933	Santa Clara	WB Observer	37 20	121 39	4206	7S	3E			11P	11P		1881	900
Mount Madonne	D1 5973	Santa Cruz	J. Schell	37 01	121 43	1800	10S	2E	35		C			1945	900
Mt. Madonna Co. Park	D1 5973-11	Santa Clara	W Foss	37 01	121 43	1880	11S	2E	1	B	8A			1937	909
Mt. Tamalpais 2 SW	E2 5996	Mario	Bch. & Pks.	37 54	122 36	1480	1N	7W			C			1959	900
Muir Woods	E2 6027	Marin	Park Ser.	37 54	122 34	170	1N	6W			9A			1940	900
Napa	E3 6065	Napa	E. Gipson	38 18	122 17	16	5N	4W	3		7A			1945	900
Napa-Haven	E3 6068	Napa	D. Haven	38 17 30	122 17 48	30	5N	4W	10		8A	8A		1931	000
Napa State Hospital	E3 6074	Napa	J. Allemant	38 17	122 16	60	5N	4W	14	H	5P	5P		1877	900
Navarro 1 NW	F9 6105	Mendocino	Masonite Co.	39 10	123 34	220	15N	15W	7		C			1958	900
Newark	E5 6144	Alameda	Leslie Salt	37 31	122 02	14	5S	2W			8A	8A	8A	1891	900
Novato 8 WNW	E2 6290	Marin	E. Thompson	38 08	122 43	350	4N	8W	24		C			1943	900
Novato Fire House	E2 6290-02	Marin	S. Ludera	38 06 30	122 33 42	18	3N	6W	7		D			1957	411
Oakland WBAP	E4 6335	Alameda	USWB	37 44	122 12	3	2S	3W			C	C		1939	900
Oakville 1 WNW	E3 6351	Napa	A. Calkins	38 27	122 25	160	7N	5W	21		6P			1906	900
Oakville 4 SW	E3 6354	Napa	R. Fleiner	38 23	122 28	1465	6N	5W	6		C			1940	900
Occidental	F9 6370	Sonoma	A. Blaney	38 25	122 59	1000	7N	10W	33		7A			1940	900
Paicines Ohrwall Ranch	D1 6110	San Benito	J. Ohrwall	36 44	121 22	950	14S	5E	12		8A			1924	900
Palo Alto City Hall	E7 6646	Sante Clara	Engr. Dept.	37 27	122 08	23	6S	3W	1		8A	8A		1953	900
Paloma	D2 6650	Monterey	J. Bell	36 21	121 30	1835	18S	4E	23		5P			1940	900
Parkfield	D3 6703	Monterey	H. Durham	35 53	120 26	1482	23S	14E	35		7A			1938	900
Parkfield 7 NNW	D3 6706	Monterey	R. Morrison	36 00	120 28	3590	22S	14E			C			D	900
Penitencia Rain Gage	E6 6791-43	Sante Clara	G. Dodson	37 24 00	121 49 54	260	6S	1E			7A			1962	414
Penngrove 2 N	F9 6792-03	Sonoma	F. Riebli	38 20	122 40	200	6N	7W	29		7A			1930	403
Petaluma F. S. No. 2	E2 6826	Sonoma	Fire Dept.	38 14	122 38	16	5N	7W	33		5P	5P		1871	900
Petaluma-Burns	E2 6826-01	Sonoma	Burns	38 13 00	122 42 48	240	4N	8W	2		8A			1959	901
Petaluma 1 N	E2 6829	Sonoma	V. Chaix	38 15	122 38	30	5N	7W			C			1943	900
Pico Blanco 8 S. Camp	D4 6856	Monterey	P. Harlan	36 20 18	121 47 42	900	18S	2E	30		8A			1957	000
Pinnacles National Mon.	D2 6926	San Benito	Park Ser.	36 29	121 11	1310	17S	7E	2		4P	4P		1937	900
Pleasanton Nursery	E5 6991-05	Alameda	J. F. Lopez	37 40	122 53	345	3S	1E	20		8A	4:30P		1939	000
Point Arena	F8 7009	Mendocino	J. Moungovan	38 55	123 42	122	12N	17W	12		8A	8A		1940	900
Point Piedras Blancas	D5 7024	San Luis Obispo	Coast Guard	35 40	121 17	59	26S	6E	12		11P	11P		1938	900
Port Chicago NAD	E4 7070	Contra Costa	Naval Mag.	38 01	122 01	50	2N	1W			8A	8A		1946	900
Portola State Park	E8 7086	San Mateo	Park Ranger	37 14 42	122 12 42	422	8S	3W	8	Q	8A			1959	901
Potter Valley 3 NNW	F9 7107	Mendocino	W. Despain	39 22	123 08	1060	17N	11W	6		C			1953	900
Potter Valley 3 SE	F9 7108	Mendocino	R. Near	39 18	123 04	1100	17N	11W	27		C			1952	900
Potter Valley F. H.	F9 7109	Mendocino	P. G. & E.	39 22	123 08	1014	17N	11W	6		3P	3P		1911	900
Priest Valley	02 7150	Monterey	N. Palmer	36 11	120 42	2300	20S	12E	21		SS	SS		1898	900
Quien Sabe-Hay Camp	D1 7190	San Benito	J. F. Berta	36 51 30	121 11 48	1630	12S	7E	27	M	7A	7A		1949	000
Rancho Quien Sabe	D1 7249	San Benito	R. Somavia	36 50 12	121 12 48	1800	13S	7E	4	D	D			1931	000
Rancho Rico	D4 7249-21	Monterey	B. Stiller	36 14 24	121 47 24	900	19S	2E	31		8A			1941	000
Redwood City	E7 7339	San Mateo	Fire Dept.	37 29	122 14	31	5S	3W			5P	5P		1899	900
Richmond	E4 7414	Contra Costa	Richmond	37 56	122 21	55	1N	4W			8A	8A		1950	900
Roosevelt Ranch	D4 7539-01	Monterey	N. Roosevelt	36 10 48	121 41 48	1100	20S	2E	24		8A	8A		1946	000
Saint Helena	E3 7643	Napa	E. Faulson	38 30	122 28	255	8N	5W	31	N	6P	6P		1907	900
Saint Helena 4 WSW	E3 7646	Napa	E. Learned	38 30	122 32	1792	7N	6W	4		C			1939	900
Saint Mary's College	E4 7661	Contra Costa	Fr. Benedict	37 50	122 06	625	1S	2W	17		5P	5P		1942	900
Salinas 2 E	D2 7668	Monterey	Fire Dept.	36 40	121 37	80	14S	3E	34		5P	5P		1958	900
Salinas PAA Airport	D2 7669	Monterey	Fed. Av. Agency	36 40	121 36	80	14S	3E			C	C		1873	900
Salinas Dam	03 7672	San Luis Obispo	Dam Operator	35 20	120 30	1386	30S	14E	8		8A			1942	900

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STATION NAME	STA NUMBER	COUNTY	OBSERVER	LATITUDE ° ' "	LONGITUDE ° ' "	ELEV IN FEET	TOWNSHIP	RANGE	SECTION	40 ACRE TRACT	TIME OF OBSERVATION F	T	E	RECORD BEGAN	COOP NO
San Anselmo	E2 7707-01	Marin	Marin Co. Engr.	37 58 36	122 33 42	100	2N	6W	7		D			1957	411
San Antonio Mission	D3 7714	Monterey	San Antonio Msn.	36 01	121 15	1060	22S	7E	18		5F	5F		1959	900
San Ardo	D2 7716	Monterey	W. Rosenberg	36 00 48	120 54 06	440	22S	10E	16	K	8A			1894	900
San Benito	D1 7719	San Benito	J. Shields	36 30 30	121 04 54	1355	16S	8E	27	B	C			1936	900
San Clemente Dam	D4 7731	Monterey	Wtr & Tel Co	36 26 12	121 42 30	600	17S	2E	23		7A			1940	900
San Felipe Highway Sta.	D1 7755	Santa Clara	Div. of Highways	37 01	121 20	365	10S	6E			C			1943	900
San Fran. Richmond Sunset	E8 7767	San Francisco	San Francisco	37 46	122 30	300	2S	6W			C	5F		1948	900
San Francisco WBAP	E7 7769	San Mateo	USWB	37 37	122 23	8	3S	5W			C	C		1928	900
San Fran. Fed. Off. Bldg.	E7 7772	San Francisco	USWB	37 47	122 25	52	2S	6W			C	C		1931	900
San Gregorio 3 SE	E8 7807	San Mateo	Pomponio Rch	37 18	122 20	355	7S	4W	30		5F	5F		1954	900
San Jose	E6 7821	Santa Clara	E. Billwiller	37 21	121 54	70	7S	1E			C	C		1874	900
San Jose Decid. F.F.S.	E6 7824	Santa Clara	A. Amstutz	37 19	121 57	90	7S	1W	15	J	8A	C		1935	801
San Juan Bautista Miss.	01 7835	San Benito	H. A. Farber	36 50 42	121 32 00	200	12S	4E			8A			1900	804
San Lucas Guidici	D2 7845-10	Monterey	DWR - L & WU	36 07 25	121 01 09	380	21S	9E	8	B	V		V	1962	806
San Mateo	E7 7864	San Mateo	Fire Dept.	37 34	122 19	30	4S	4W	29		5F	5F		1874	900
San Rafael	E2 7880	Marin	City Engr.	37 58	122 32	31	2N	6W			5F	5F		1948	900
San Rafael Nat. Bank	E2 7880-08	Marin	Crocker-Cit. Bank	37 58 24	122 31 30	25	2N	6W			8A			1876	413
Santa Clara University	E6 7912	Santa Clara	Santa Clara Univ.	37 21	121 56	88	7S	1W			5F	5F		1881	900
Santa Cruz	D0 7916	Santa Cruz	R. Burton	36 59	122 01	125	11S	1W			5F	5F		1866	900
Santa Rita Mother	D2 7959-10	Monterey	DWR - L & WU	36 45 00	121 41 24	80	14S	3E	12	H	V	C	V	1962	806
Santa Rosa Sewage Plant	F9 7964	Sonoma	M. McKinnie	38 26 24	122 45 12	20	7N	8W	21	F	8A	8A	8A	1956	000
Santa Rosa	F9 7965	Sonoma	C. Newberry	38 27	122 42	167	7N	8W			7A	7A		1888	900
Santa Rosa Pedranzini	F9 7965-03	Sonoma	DWR - L & WU	38 21 38	122 44 31	90	6N	8W	16	R	V		V	1962	806
Saratoga-Clark	E6 7998-01	Santa Clara	J. Clarke	37 16 48	121 59 42	272	7S	1W	31		7A			1956	414
Saratoga-Kriege	E6 7998-03	Santa Clara	D. Kriege	37 15	122 02	240	8S	2W	1		7A			1960	414
Searsville Lake	E6 8068	San Mateo	A. Clapp	37 24	122 14	350	6S	3W	12		8A			1949	900
Sebastopol 4 SSE	F9 8072	Sonoma	G. Wahmens	38 21	122 49	150	6N	9W	6		C			1935	900
Skaggs Spg. Las Lomas Rch.	F9 8272	Sonoma	J. Leithold	38 41	123 08	1930	10N	12W	36		8A			1939	900
Slack Canyon	D2 8276	Monterey	Div. of Forestry	36 05	120 40	1730	21S	12E	22		C			1955	900
Soledad CIF	02 8338-01	Monterey	F.F. Bontadelli	36 28 26	121 22 34	230	17S	5E	12	B	9A	9A	9A	1961	000
Soledad	D2 8338	Monterey	J. Francioni	36 26	121 19	204	17S	6E			8A			1874	900
Sonoma	E2 8351	Sonoma	L. Dickey	38 17	122 27	20	5N	5W	7		5F	5F		1952	900
Spreckels Hwy. &..	02 8446	Monterey	B. Rennes	36 36	121 41	60	15S	3E			8A			1905	900
Spreckels	D2 8446-01	Monterey	Spreckels Sugar Co.	36 37	121 39	48	15S	3E			8A	8A		1905	000
Spreckels Hill - Laguna Seca	E6 8447	Santa Clara	SCVWCD	37 12	121 44	384	9S	3E			8A			D	414
Stevens Creek Reservoir	E6 8519	Santa Clara	SCVWCD	37 18	122 05	600	7S	2W	28	H	8A			1937	414
Suey Ranch	D6 8627	San Luis Obispo	Suey Ranch	34 59 40	120 22 35	390	9N	33W			5F			1909	900
Sunset Beach St. Park	01 8680	Santa Cruz	Bch. & Pks.	36 54	121 50	85	11S	1E			C			1956	900
Talmage	F9 8776-01	Mendocino	L.C. Von Schriltz	39 08	123 11	413	15N	12W	10		8A			1953	000
Tamalpais Valley	E2 8779	Marin	Gleasner	37 52 42	122 32 36	250	1N	6W			8A			1959	901
Templeton	D3 8849	San Luis Obispo	A. Willhoit	35 32 30	120 42 21	773	27S	12E	29		8A	8A		1886	000
The Geysers	F9 8885	Sonoma	F. Dewey	38 48	122 49	1600	11N	9W	23		C			1939	900
Tiburon-Topham	E2 8920-21	Marin	H. Topham	37 52 24	122 27 12	400	1S	5W	4		9A			1960	000
Travis Air Force Base	E3 9006	Solano	U.S.A.F.	38 16	121 56	50	5N	1W	24	E	8A			1943	902
Ukiah	F9 9122	Mendocino	Fire Dept.	39 09	123 12	623	15N	12W	17		5F	5F		1877	900
Ukiah 4 WSW	F9 9124	Mendocino	M. Dory	39 08	123 17	1900	15N	13W	27		8A			1951	900
Upper Morro Creek	D6 9179	San Luis Obispo	E. Purser	35 27 18	120 45 12	1050	28S	11E	35	B	7A			1951	000
Upper San Leandro Filters	E4 9185	Contra Costa	E. Ray MUD	37 46	122 10	390	2S	3W	11	G	7A	7A		1944	900
Upper Tres Pinos	D1 9189	San Benito	E. Francher	36 38	121 02	2050	15S	9E	7		C			1940	900
Valleton	D3 9221	Monterey	A. Curtis	35 53	120 42	950	23S	12E	32		C			1940	900
Vasona Reservoir	E6 9270	Santa Clara	SCVWCD	37 14 36	121 58 00	300	8S	1W	15		8A			1962	414
Venado	F9 9273	Sonoma	J. Harper	38 37	123 01	1260	9N	10W	19		C			1939	900
Veterans Home	E3 9305	Napa	B. Barboza	38 23	122 22	170	6N	5W	1		8A	8A		1912	000
Walnut School	E4 9420	Contra Costa	M. Dennis	37 57	122 05	128	1N	2W			5F			1954	900
Walnut Creek 2 ESE	E4 9423	Contra Costa	E. Whittemore	37 53	122 02	245	1N	2W	36		8A	8A		1887	900
Walnut Creek 2 ENE	E4 9426	Contra Costa	T. Vanasek	37 54	122 01	220	1N	2W	30		C			1944	900
Walnut Creek 4 E	E4 9427	Contra Costa	E. Irving	37 54	121 59	400	1N	1W			9A			1954	900
Watsonville Water Works	D1 9473	Santa Cruz	L. Bechis	36 56	121 46	95	11S	2E	32		8A	8A		1880	900
Wilder Ranch	D0 9675	Santa Cruz	O. K. Wilder	36 57 36	122 05 24	50	11S	2W	22		5F			1924	000
Wild Horse Valley	E3 9675-41	Solano	G. Stiltz	38 17 53	122 11 13	1240	5N	3W	10	D	8A	2F		D	418
Woodacre	F9 9770	Marin	Div. of Forestry	38 00 24	122 38 30	430	2N	7W			2F	2F		1950	808
Wrights	E6 9814	Santa Clara	M. Ware	37 08	121 57	1600	9S	1W	23		5F			1918	900
Yorkville	F8 9851	Mendocino	L. Mulbert	38 55	123 16	1100	12N	13W	2		C			1939	900
Yountville Gamble	E3 9861	Napa	DWR - L & WU	38 26 05	122 22 05	120	7N	5W	24	F	V	C	V	1962	806

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E6 0053	Alamitos Perc. Pond	23.92	0	0	T	7.37	.13	2.11	4.45	2.91	3.27	3.26	.42	T
E4 0064	Alamo 1N	35.19	0	.07	T	12.67	.48	2.19	3.56	6.08	4.52	4.80	.71	.11
E6 0125	Almaden Reservoir	53.10	0	.03	0	17.14	.40	3.15	9.75	8.18	7.14	6.71	.60	0
E3 0212	Angwin PUC	55.21	0	.09	.33	14.47	1.76	6.55	10.54	4.61	7.12	8.62	1.12	0
D2 0322	Arroyo Seco	13.88	0	0	0	.59	T	T	.81	6.55	2.50	2.51	.05	.87
E3 0372	Atlas Road	53.62	0	.02	.37	[e]11.52	1.83	4.80	13.40	3.66	7.90	8.92	1.08	.12
D3 0360-01	Atascadero H.M.S.	20.12	0	0	0	.71	0	1.46	2.33	6.57	4.47	4.08	.36	.14
D0 0674	Ben Lomond	67.81	0	.13	.12	14.97	.87	5.46	16.97	9.30	9.24	9.74	1.01	0
E4 0693	Berkeley	30.05	0	.12	.41	7.05	.94	3.50	4.84	3.10	3.51	5.97	.53	.08
E6 0706	Berryessa 1E	25.16	0	0	0	3.95	.76	2.60	2.90	3.71	4.72	5.42	1.10	0
D4 0790	Big Sur State Park	60.16	0	0	T	8.15	.35	6.61	13.89	11.67	7.80	11.08	.53	.08
E6 0850	Black Mountain 2SW	42.84	T	.15	.16	11.44	.83	3.55	6.07	7.85	4.84	6.84	1.09	.02
F9 0876	Blakes Landing	31.32	0	.10	.25	8.72	.98	4.04	5.05	2.21	4.06	5.64	.27	0
F8 0973	Boonville HMS	47.22	0	.37	.73	8.41	3.03	4.24	4.93	7.32	7.70	9.05	1.44	0
F8 0973-02	Boonville - Farrer	65.08	0	.25	.87	10.97	3.76	5.98	8.13	9.38	12.32	11.46	1.96	0
F8 0973-04	Boonville - Bell Valley	M	0	.30	.71	8.41	3.67	4.30	6.63	4.22	D	D	D	0
D4 0998-27	Bouchers Gap	M	NR	NR	NR	NR	RB	4.22	9.79	10.33	9.20	9.58	.81	.04
D3 1034	Bradley	15.78	0	0	.02	.99	0	2.29	2.71	4.85	2.68	1.83	.41	T
D1 1170	Buena Vista	13.08	0	0	0	.89	[e].27	[e]1.93	2.34	1.69	2.60	2.64	.54	.18
E7 1206	Burlingame	24.96	0	.04	0	6.68	.37	2.81	3.63	3.15	4.17	3.66	.45	0
E4 1216	Burton Ranch	36.00	0	.05	.05	13.33	.60	2.69	3.83	5.68	4.38	4.68	.66	.05
D1 1247	Buzzard Lagoon	55.77	0	.25	0	10.75	1.98	4.80	11.78	7.32	6.82	11.24	.83	0
E5 1281	Calaveras Reservoir	22.81	0	.04	0	3.79	.66	2.26	1.65	4.08	4.10	5.24	.99	0
E6 1285	Calero Reservoir	33.72	0	0	0	9.10	.23	2.30	9.31	3.93	4.49	4.00	.36	0
E3 1312	Calistoga	53.78	0	.04	.36	13.87	1.77	5.93	5.82	8.78	8.17	8.11	.91	.02

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E6 1341-10	Cambrian Park	M	NR	NR	NR	RB	.15	2.27	4.08	3.86	3.78	3.74	.55	.01
E6 1377-01	Campbell Water Company	23.03	e0	e0	e0	4.72	.13	2.49	5.24	2.55	3.65	3.69	.55	.01
D4 1534	Carmel Valley	19.72	0	0	0	1.09	.11	2.22	5.28	3.21	3.70	3.86	.22	.03
F9 1602	Cazadero	82.63	0	.65	.63	15.18	3.88	11.64	13.48	7.70	10.22	17.69	1.53	.03
D1 1739	Chittenden Pass	25.68	0	.50	.03	2.77	.40	2.86	5.08	4.48	3.92	5.35	.24	.05
D1 1739-01	Chittenden	24.95	0	0	0	2.64	.36	2.78	4.74	5.05	3.80	5.39	.19	T
D1 1766	Cienaga	20.73	0	0	0	.70	.35	3.25	4.24	4.05	3.52	3.88	.57	.17
F9 1838	Cloverdale 3SSE	49.74	T	.26	.41	12.24	1.42	5.81	6.43	6.58	7.80	7.28	1.51	0
F9 1840	Cloverdale 11W	e73.52	0	.53	1.09	15.37	4.45	8.65	e13.38	e5.42	10.02	12.00	2.61	0
E4 1962	Concord 3E	23.30	0	.01	0	8.12	.37	1.60	2.03	4.18	3.16	3.18	.58	.07
E3 1976	Conn	38.42	0	0	.10	9.90	.64	5.03	5.12	5.59	4.91	5.44	1.69	0
F9 2105	Coyote Dam - Lake Mendocino	40.60	0	.16	.51	8.60	2.72	5.15	4.20	5.04	5.87	7.37	.80	.18
E6 2109	Coyote Reservoir	27.79	0	0	T	2.42	.43	2.60	6.22	6.39	3.79	5.48	.45	.01
D0 2159	Crest Ranch	74.50	0	.50	.35	21.70	1.35	7.90	11.70	12.80	8.40	8.60	1.20	0
E4 2177	Crockett	28.88	0	.05	.01	8.88	.84	2.18	3.78	3.72	4.58	4.20	.59	.05
D0 2290	Davenport	29.15	.02	.15	.14	4.18	.41	3.03	3.48	5.79	6.06	5.16	.71	.02
D2 2362	Del Monte	13.10	0	0	.03	.73	.13	1.91	2.64	1.87	3.04	2.58	.17	0
E3 2580	Duttons Landing	28.67	0	.07	.06	7.95	.78	2.61	4.12	3.36	5.07	4.46	.19	T
E6 2919	Evergreen - Silver Creek Rd.	M	NR	NR	NR	NR	NR	RB	2.61	2.96	3.15	3.72	.57	T
E3 2933	Fairfield	25.63	0	.02	0	7.27	.70	2.17	5.02	2.30	3.41	4.21	.46	.07
E3 2934	Fairfield Police Station	28.20	0	0	T	7.85	.16	2.58	5.32	2.67	3.59	5.49	.45	.09
F8 3161	Fort Bragg	36.73	0	1.59	.83	5.82	e3.21	3.63	3.24	2.70	6.50	8.29	.84	.08
F8 3164	Fort Bragg Avn	40.17	0	1.97	.79	6.23	3.32	4.35	3.87	2.51	6.67	9.50	.96	0
F8 3191	Fort Ross	38.58	.02	.74	1.36	7.23	1.93	5.78	4.79	3.89	5.33	6.43	1.05	.03
D1 3232	Freedom 8NNW	e56.54	0	.19	0	11.61	1.51	4.78	e15.84	e5.23	7.17	9.54	.67	0

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D1 3238	Fremont Peak State Park	23.41	0	.03	.03	2.30	.50	2.30	4.72	3.99	3.38	5.25	.86	.05
E5 3387	Gerber Ranch	23.96	0	0	T	3.87	.22	1.78	4.64	5.47	3.17	4.10	.71	0
D1 3417	Gilroy	26.52	0	T	T	2.13	.48	2.36	6.15	5.85	3.97	5.19	.39	T
D1 3419	Gilroy 8NE	e26.28	0	0	0	2.48	.32	2.27	e8.74	e3.20	3.67	5.11	.31	.18
D1 3422	Gilroy 14ENE	24.99	0	T	T	2.55	.26	1.85	4.80	5.93	3.69	5.36	.41	.14
D2 3502	Gonzales 9ENE	13.14	0	0	0	.55	.15	2.30	2.07	1.69	3.04	2.56	.66	.12
F9 3577	Graton	46.61	0	.26	.51	10.47	1.17	6.03	6.63	6.19	6.26	8.27	.82	0
F9 3578	Graton 1W	47.60	T	.18	.44	10.90	1.34	6.30	9.07	3.65	6.89	8.06	.77	T
E3 3612-01	Green Valley	M	D	D	D	D	D	D	5.56	5.96	D	D	D	D
E6 3681	Guadalupe Reservoir	46.97	0	.05	0	15.79	.35	2.48	9.25	6.92	6.02	5.37	.74	0
F9 3683	Guerneville	48.81	0	.33	.63	9.59	1.74	6.47	5.89	6.62	7.36	9.25	.93	0
E8 3714	Half Moon Bay 2NNW	33.08	0	.29	.51	10.97	.60	3.57	3.44	3.65	4.33	5.08	.64	0
E2 3734	Hamilton Air Force Base	33.43	0	T	T	8.07	.80	3.70	8.24	2.46	5.55	4.25	.36	0
E4 3863	Hayward 6ESE	e33.54	0	.03	0	10.90	1.05	2.44	5.22	2.65	4.73	5.58	e.92	.02
F9 3875	Healdsburg	50.32	T	.30	.26	10.83	2.06	6.40	10.75	3.99	7.74	6.85	1.14	0
F9 3878	Healdsburg 2E	46.35	0	.29	.23	9.92	1.93	5.98	6.65	6.33	7.04	6.80	1.18	0
D1 3928	Hernandez 7SE	19.09	0	0	0	.97	0	2.70	4.46	3.98	2.87	3.30	.52	.29
D1 4022	Hollister	14.87	0	T	T	.72	.25	1.78	3.89	2.91	2.11	2.72	.39	.10
D1 4025	Hollister No. 2	14.39	0	0	0	.69	.22	1.73	4.45	2.03	2.12	2.61	.39	.15
D1 4035	Hollister 10ENE	24.96	0	0	0	2.45	.31	2.15	6.02	3.21	4.23	5.79	.58	.22
F9 4100	Hopland Largo Station	41.85	0	.13	.57	8.42	2.57	4.75	4.86	4.36	7.85	7.54	.80	0
F9 4277	Inverness - Mery	45.70	0	.25	.50	12.90	1.30	5.35	6.20	4.10	6.10	8.05	.95	0
F9 4480	Kellogg	64.78	T	.27	.89	15.79	3.07	7.19	8.67	7.31	8.16	11.19	2.24	0
E2 4500	Kentfield	57.65	0	.21	.28	12.97	1.70	7.34	8.95	8.31	8.19	8.97	.73	T
D2 4555	King City	15.61	0	0	0	.59	0	2.00	5.99	1.68	2.89	1.67	.42	.37

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E4 4633	Lafayette 2NNE	35.68	0	.06	.08	13.02	.70	2.58	4.72	5.04	3.65	4.97	.81	.05
F9 4652	Lagunitas Lake	64.86	0	.29	.38	15.15	1.45	8.64	11.44	7.78	9.22	9.46	1.05	0
E8 4660	La Honda	40.05	.08	.29	.42	9.67	.83	3.87	6.69	5.01	5.38	6.33	1.38	.10
E3 4677	Lake Curry	e39.10	e0	e0	.14	9.99	.77	2.67	6.02	5.75	6.36	6.51	.89	0
E6 4916	Leroy Anderson Dam	M	0	.04	0	D	.21	2.18	7.08	4.78	4.20	4.28	.21	0
E6 4922	Lexington Reservoir	54.92	0	.02	.01	14.69	.48	4.19	9.71	10.02	7.00	8.00	.80	0
D3 4963	Linn Ranch	M	0	0	0	.99	0	3.00	4.63	D	D	3.29	.20	.04
E5 4996	Livermore Sewage Plant	22.12	0	0	0	5.33	.30	1.93	2.03	5.60	3.10	3.35	.47	.01
E5 4997	Livermore 2SSW	18.14	0	T	0	3.64	.28	1.55	1.40	4.50	2.60	3.47	.70	T
D3 5017	Lockwood 2N	17.31	0	0	0	.47	0	2.92	4.80	2.65	3.13	2.98	.30	.06
D5 5120-03	Los Burros	M	NR	NR	NR	10.15	.10	5.70	16.05	15.65	18.70	D	1.56	.25
E6 5123	Los Gatos	40.65	0	0	0	11.26	.28	3.09	5.02	10.00	e4.42	6.02	.56	0
E6 5123-04	Los Gatos - Old Orchard Road	M	NR	NR	NR	NR	NR	NR	NR	RB	4.69	4.39	.60	.01
D0 5125	Los Gatos 4SW	74.86	0	.03	.06	18.37	.72	5.91	8.99	15.77	10.85	12.91	1.25	T
E3 5333	Mare Island	27.71	0	.05	.02	8.61	.83	2.34	4.87	2.27	4.15	4.20	.37	0
E4 5371	Martinez 3S	32.59	0	.08	0	e11.91	.54	2.11	5.68	2.73	5.12	3.96	.36	.10
E4 5372	Martinez 3SSE	31.15	0	.08	0	11.20	.59	2.13	3.84	4.51	4.59	3.79	.34	.08
E4 5377	Martinez Fire Station	27.63	0	.05	0	9.25	.62	1.89	3.15	4.39	4.11	3.73	.42	.02
E2 5647	Mill Valley	35.37	0	.05	.78	8.61	1.00	4.75	5.32	3.99	5.09	5.27	.51	0
D4 5795	Monterey	M	0	.25	.15	1.33	.37	2.21	3.05	2.70	4.14	NR	NR	NR
E6 5844	Morgan Hill 2E	28.18	0	0	0	4.54	.31	2.28	6.77	5.18	4.47	4.38	.25	0
E6 5844	Morgan Hill 6WNW	40.56	0	0	0	10.64	.22	2.58	14.37	2.45	5.07	4.93	.30	0
D1 5853	Morgan Hill SCS	e28.28	0	0	0	4.41	.22	2.27	e10.16	2.20	4.49	4.33	.20	0
D6 5869	Morro Bay 3N	21.23	0	0	0	.92	0	4.04	2.87	4.10	5.01	4.03	.62	.14
E4 5915	Mt. Diablo North Gate	34.20	0	0	0	10.67	.65	2.16	3.62	7.09	3.64	5.38	.99	0

TABLE A-2

SEASONAL PRECIPITATION

NUMBER	STATION NAME	TOTAL	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E5 5933	Mt. Hamilton	17.93	0	0	T	1.71	.64	1.68	1.68	2.79	4.33	4.16	.94	0
D1 5973	Mt. Madonna	e51.10	0	.10	.07	e9.90	1.71	4.20	e14.20	4.35	5.76	10.56	.35	0
D1 5973-11	Mt. Madonna Co. Pk.	49.14	.01	.20	.05	9.45	1.75	3.91	8.66	7.93	5.79	10.55	.68	.16
E2 5996	Mt. Tamalpais 2SW	47.07	.03	.41	2.15	11.50	2.02	6.04	7.53	3.48	4.74	8.09	.97	.11
E2 6027	Muir Woods	43.80	.03	.22	1.75	10.10	1.65	5.72	5.28	4.88	5.30	7.98	.85	.04
E3 6065	Napa	33.76	0	0	.16	10.05	.80	3.33	3.93	5.02	4.18	5.63	.66	T
E3 6068	Napa - Haven	33.57	0	.02	.21	9.82	.79	3.22	4.11	4.74	4.45	5.84	.37	T
E3 6074	Napa State Hospital	35.09	0	.11	.20	10.37	.97	3.93	4.71	3.79	4.91	5.66	.44	0
F9 6105	Navarro 1NW	40.97	0	.74	.67	e7.19	e3.21	e3.95	5.18	2.23	7.15	9.68	.97	0
E5 6144	Newark	19.39	0	0	0	4.53	.34	2.20	1.51	2.88	3.09	4.19	.57	.08
E2 6290	Novato 8WNW	37.79	0	.06	.43	10.61	1.04	4.39	6.61	2.76	5.01	6.39	.49	0
E2 6290-02	Novato Fire House	31.68	0	0	.05	8.12	.40	3.32	6.19	4.45	4.89	3.87	.39	0
E4 6335	Oakland WBAP	25.65	T	.05	.19	8.56	.61	2.47	2.68	2.64	3.31	4.60	.51	.03
E3 6351	Oakville 1WNW		0	.03	.27	11.08	.79	4.24					.59	T
E3 6354	Oakville 4SW	51.42	0	.07	.25	e14.85	1.29	5.60	10.40	3.93	7.37	6.91	.75	0
F9 6370	Occidental	57.35	0	.47	1.40	11.44	1.93	9.44	7.85	6.12	7.48	9.90	1.24	.08
D1 6610	Paicines Ohrwall Ranch	17.24	0	0	0	.69	.26	2.18	2.84	4.22	2.86	3.52	.55	.12
E7 6646	Palo Alto City Hall	17.12	0	T	T	2.92	.41	2.30	1.88	3.66	2.37	3.05	.51	.02
D2 6650	Paloma	25.72	0	0	T	2.09	.07	2.54	8.83	2.53	4.98	4.42	.18	.08
D3 6703	Parkfield	16.44	0	0	0	.67	0	1.60	2.19	5.91	3.09	2.51	.47	T
D3 6706	Parkfield 7NNW	16.61	0	0	0	.82	0	2.77	4.25	3.48	2.14	2.50	.63	.02
E6 6791-43	Penitencia Rain Gage	17.80	0	0	0	2.58	.66	1.91	1.35	3.15	3.20	4.13	.82	e0
F9 6792-03	Penngrove 2N	40.73	0	.07	.35	9.37	.88	3.80	5.50	9.64	5.07	5.53	.52	0
E2 6826	Petaluma Fire Station	28.96	0	.03	.08	7.29	.61	3.32	4.97	3.04	4.58	4.58	.46	0
E2 6826-01	Petaluma - Burns	37.50	0	0	.20	10.40	.85	3.60	5.30	5.35	5.25	6.05	.50	0

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SEASONAL PRECIPITATION

NUMBER	STATION NAME	TOTAL	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E2 6829	Petaluma 1N	27.22	0	.05	.11	7.21	.45	2.96	4.84	2.74	4.43	4.00	.43	0
D4 6856	Pico Blanco Boy Scout Camp	M	0	0	0	11.10	.31	4.45	14.25	11.67	9.84	10.22	RE	NR
D2 6926	Pinnacles National Monument	16.15	0	0	0	.86	0	2.13	2.91	2.33	4.25	3.07	.15	.45
E5 6991-05	Pleasanton Nursery	26.35	0	.04	0	6.83	.42	1.64	2.28	6.71	4.25	3.67	.51	T
F8 7009	Point Arena	40.83	0	1.20	.86	7.31	3.51	5.18	3.72	3.59	6.83	7.65	.92	.06
D5 7024	Point Piedras Blancas	29.26	T	0	0	1.17	.23	5.80	6.12	5.32	4.32	5.85	.41	.04
E4 7070	Port Chicago NAD	23.13	0	T	0	8.05	.41	1.64	1.93	4.18	2.83	3.44	.59	.06
E8 7086	Portola State Park	43.84	T	T	T	10.29	T	4.38	4.31	7.68	6.97	8.98	1.23	T
F9 7107	Potter Valley 3NNW	e44.11	0	.52	.87	e8.92	3.73	5.63	6.88	2.56	6.61	7.61	.66	e.12
F9 7108	Potter Valley 3SE	33.53	0	.19	e.96	7.02	2.93	3.91	4.27	1.33	5.63	6.38	.81	.10
F9 7109	Potter Valley P.H.	47.89	0	.57	.90	9.56	3.98	6.19	6.51	3.47	7.63	8.28	.67	e.13
D2 7150	Priest Valley	22.09	0	0	T	1.43	.05	2.99	4.42	4.54	4.36	3.59	.56	.15
D1 7190	Quien Sabe - Hay Camp	17.55	0	0	0	1.02	.38	1.96	1.47	4.50	2.72	4.44	.78	.28
D1 7249	Rancho Quien Sabe	18.55	0	0	0	1.23	.38	2.07	1.89	4.62	2.96	4.43	.79	.18
D4 7249-21	Rancho Rico	63.14	0	.08	.01	9.05	.44	7.38	19.08	6.32	8.49	11.38	.72	.19
E7 7339	Redwood City	24.32	0	.01	.01	6.39	.33	2.82	4.46	3.20	3.63	2.92	.55	T
E4 7414	Richmond	29.54	0	.10	.08	7.38	.99	3.48	4.20	3.47	4.20	5.14	.50	0
D4 7539-01	Roosevelt Ranch	59.82	0	0	0	9.30	.35	8.50	6.90	20.05	5.49	8.61	.53	.09
E3 7643	Saint Helena	44.58	0	.04	.23	11.77	1.07	5.38	8.58	4.63	6.07	6.24	.57	0
E3 7646	Saint Helena 4WSW	53.82	0	.12	.73	14.80	1.71	6.65	8.81	3.51	7.87	8.42	1.20	0
E4 7661	Saint Mary's College	40.56	0	.08	.02	13.84	.99	3.07	5.82	4.99	4.90	5.96	.76	.13
D2 7668	Salinas 2E	14.53	0	.02	T	.61	.38	1.78	2.95	2.20	3.25	3.17	.17	0
D2 7669	Salinas FAA Airport	13.70	T	.03	.01	.65	.40	1.73	2.81	1.95	3.00	2.95	.16	.01
D3 7672	Salinas Dam	19.50	0	0	0	1.03	.02	1.09	2.72	5.89	4.43	3.69	.60	.03
E2 7701-01	San Anselmo	52.08	0	.01	T	12.99	.84	5.91	11.80	5.69	8.12	6.17	.55	0

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SEASONAL PRECIPITATION

NUMBER	STATION NAME	TOTAL	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
D3 7714	San Antonio Mission	24.35	0	0	T	1.09	.06	2.83	8.05	3.94	3.71	4.06	.50	.11
D2 7716	San Ardo	14.44	0	0	0	.33	0	2.26	2.99	4.19	2.65	1.77	.25	0
D1 7719	San Benito	14.48	0	0	0	.56	0	2.25	3.28	1.89	3.42	2.39	.35	.34
D4 7731	San Clemente Dam	22.79	0	0	0	1.81	.10	2.29	5.37	4.53	4.27	4.14	.23	.05
D1 7755	San Felipe Highway Station	21.20	0	0	0	1.67	.28	1.68	6.16	2.89	3.29	4.75	.37	.11
E8 7767	San Francisco Richmond Sunset	26.72	T	0	.15	7.94	0	3.75	4.45	2.00	4.65	3.23	.55	0
E7 7769	San Francisco WBAP	25.39	T	.03	.09	7.30	.36	2.97	4.47	2.03	3.94	3.70	.50	T
E7 7772	San Francisco FOB	22.15	T	.07	.22	5.51	.60	2.81	3.35	1.92	3.87	3.35	.45	T
E8 7807	San Gregorio 3SE	37.68	.06	.27	.34	8.47	.84	4.07	6.10	4.16	6.14	6.15	1.01	.07
E6 7821	San Jose	20.24	0	T	T	4.59	.28	2.00	3.99	2.23	3.53	3.08	.52	.02
E6 7824	San Jose Decid FFS	21.24	0	T	T	4.14	.25	2.06	2.97	3.67	3.63	3.80	.72	0
D1 7835	San Juan Bautista Mission	19.22	0	0	0	1.36	.29	2.46	4.20	4.00	3.31	3.33	.24	.03
E7 7864	San Mateo	27.93	0	.05	T	9.48	.31	2.60	2.87	3.32	3.72	5.02	.56	T
E2 7880	San Rafael	47.02	0	e.10	.01	10.04	.86	6.56	11.60	4.41	6.87	6.16	.41	0
E2 7880-08	San Rafael National Bank	46.71	0	.08	.01	11.13	.91	5.09	8.69	6.77	7.41	6.12	.50	0
E6 7912	Santa Clara University	18.83	0	0	0	4.16	.08	2.01	3.30	1.90	3.56	3.31	.51	T
D0 7916	Santa Cruz	33.86	0	.05	.31	2.95	.99	3.70	7.15	4.91	5.81	7.41	.55	.03
F9 7964	Santa Rosa Sewage Plant	31.24	0	.09	.24	7.81	.83	4.40	4.87	2.08	4.94	5.42	.56	0
F9 7965	Santa Rosa	35.64	0	.08	.36	9.47	.95	4.64	3.75	4.22	4.94	6.57	.66	0
E6 7998-01	Saratoga - Clark	27.81	0	0	0	6.87	.19	2.37	4.68	4.60	4.36	4.22	.52	T
E6 7998-03	Saratoga - Kriege	30.06	0	0	0	7.01	.26	2.73	5.85	5.36	4.30	4.02	.53	T
E6 8068	Searsville Lake	34.98	0	.04	.05	8.65	1.02	3.43	3.99	5.58	5.66	5.88	.68	0
F9 8072	Sebastopol 4SSE	33.15	0	.09	.39	8.75	.73	3.60	4.96	2.59	5.48	5.87	.69	0
F9 8272	Skagg Spg. Las Lomas Ranch	70.81	0	.59	.56	15.42	2.75	7.95	9.09	9.71	9.72	12.58	2.42	.02
D2 8276	Slack Canyon	18.29	0	0	0	.87	.03	2.86	3.75	4.33	2.86	2.81	.66	.12

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SEASONAL PRECIPITATION

NUMBER	STATION NAME	TOTAL	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
D2 8338-01	Soledad C.T.F.	11.40	0	0	0	.25	.04	1.78	2.46	2.12	2.65	1.73	.14	.23
D2 8338	Soledad	12.36	0	.01	.01	.33	.06	1.82	2.67	2.32	2.62	2.13	.19	.20
E2 8351	Sonoma	34.40	0	T	.46	9.12	.69	4.57	5.77	2.94	4.86	5.28	.71	0
D2 8446	Spreckels Highway Br.	14.02	0	T	0	.63	.29	1.87	1.67	2.84	3.31	3.16	.24	.01
D2 8446-01	Spreckels	12.99	0	0	0	.55	.31	1.86	2.26	1.90	3.22	2.68	.21	0
E6 8447	Spreckels Hill - Laguna Seca	27.02	0	0	0	6.81	.23	1.92	6.57	3.94	3.63	3.58	.34	e0
E6 8519	Stevens Creek Reservoir	34.84	0	T	T	7.87	.34	3.18	5.40	6.59	5.20	5.20	1.06	e0
D6 8627	Suey Ranch	13.53	0	0	0	.54	0	.42	1.01	4.05	3.53	3.10	.88	0
D1 8680	Sunset Beach State Park	23.89	0	.09	0	2.22	.27	2.93	6.24	3.17	4.30	4.48	.19	0
F9 8776-01	Talmage	37.34	0	.15	.76	7.19	2.81	4.53	4.07	4.51	6.26	6.21	.85	0
E2 8779	Tamalpais Valley	40.19	0	.12	1.05	9.28	1.47	5.15	5.35	4.48	5.48	7.06	.75	0
D3 8849	Templeton	17.70	0	0	0	0	T	2.32	2.67	5.65	3.58	3.08	.39	.01
F9 8885	The Geysers	e68.06	0	.19	.47	14.85	2.26	8.14	e14.30	4.58	10.10	10.59	2.58	0
E2 8920-21	Tiburon - Topham	48.03	0	.01	.87	11.15	.75	6.18	7.10	6.72	7.65	6.74	.87	0
E3 9006	Travis Air Force Base	24.55	0	.01	.01	4.74	.48	2.45	4.56	2.83	4.60	4.11	.72	.04
F9 9122	Ukiah	44.22	0	.20	.68	7.74	3.09	5.25	7.75	3.22	7.61	7.61	1.07	T
F9 9124	Ukiah 4WSW	e54.93	e0	.36	.87	9.24	3.64	5.60	4.36	6.66	9.05	9.87	1.28	T
D6 9179	Upper Morro Creek	30.47	0	0	0	2.26	.10	3.18	5.79	6.03	6.26	5.72	.81	.32
E4 9185	Upper San Leandro Filters	35.13	0	.14	.43	13.13	.95	2.97	2.62	4.47	4.09	5.64	.69	0
D1 9189	Upper Tres Pinos	13.38	0	0	0	.71	.16	2.19	2.29	2.13	3.30	2.30	.30	0
D3 9221	Valleton	14.56	0	0	0	.29	0	2.47	3.37	3.49	2.64	1.89	.41	0
E6 9270	Vasona Reservoir	M	D	.02	D	D	D	2.66	6.19	4.54	4.31	4.35	.44	D
F9 9273	Venado	e70.54	0	.49	.60	13.52	3.20	8.78	e15.97	5.62	9.75	10.71	1.90	0
E3 9305	Veterans Home	41.37	0	.02	T	11.76	1.02	5.18	7.07	2.75	6.97	5.97	.63	0
E4 9420	Walmar School	31.98	0	.06	T	10.99	.49	2.19	6.27	3.34	3.82	4.10	.72	0

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SEASONAL PRECIPITATION

NUMBER	STATION NAME	TOTAL	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E4 9423	Walnut Creek 2ESE	29.58	0	.05	T	10.74	.41	1.84	3.17	5.30	3.42	3.92	.67	.06
E4 9426	Walnut Creek 2ENE	e26.57	0	.06	0	e9.71	.34	1.74	5.62	e2.00	2.96	3.47	.62	.05
E4 9427	Walnut Creek 4E	25.15	0	.07	0	9.13	.35	1.59	2.36	4.61	2.97	3.35	.71	.01
D1 9473	Watsonville W.W.	28.85	0	.10	.01	3.81	.53	2.92	5.90	4.78	4.39	6.20	.20	.01
D0 9675	Wilder Ranch	25.63	0	.10	.09	2.50	.47	2.77	4.16	4.62	5.19	5.08	.65	0
E3 9675-41	Wild Horse Valley	46.00	0	.14	.22	12.85	1.34	2.90	6.54	6.29	7.40	7.15	1.06	.11
F9 9770	Woodacre	50.43	0	.10	.12	12.06	1.44	5.58	9.86	4.77	7.44	8.21	.85	0
E6 9814	Wrights	67.71	0	.22	0	18.07	.92	6.07	15.91	8.94	6.33	10.49	.76	0
F8 9851	Yorkville	e57.91	0	.34	.44	10.25	3.11	6.42	e11.74	4.73	9.28	9.48	2.12	0

TABLE A-3

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E6 0053	Alamitos Perc. Pond	Max	90	96	93	88	82	73	65	77	75	73	89	93
		Min	48	47	37	37	31	28	22	37	34	35	39	44
		Avg Max	80.7	82.3	78.4	71.7	66.3	59.4	55.7	67.0	63.5	63.4	70.5	80.0
		Avg Min	51.6	53.6	49.1	47.1	43.3	39.0	34.0	45.7	40.3	44.3	49.4	50.4
		Avg	66.2	68.0	63.8	59.4	54.8	49.2	44.9	56.0	51.9	53.9	60.0	65.2
E4 0064	Alamo 1N	Max	99	100	93	90	78	65	60	71	71	73	88	97
		Min	49	48	47	44	32	25	24	37	32	33	40	44
		Avg Max	78.2	86.1	82.0	70.8	65.1	53.9	51.2	65.3	63.2	64.5	71.6	79.3
		Avg Min	50.0	53.3	51.2	51.1	43.2	38.5	32.2	45.7	38.7	42.4	49.1	50.8
		Avg	64.1	69.7	66.6	61.0	54.1	46.2	42.2	55.5	51.0	53.5	60.4	65.1
E3 0212	Angwin Pacific Union College	Max	97	100	94	82	78	66	64	71	68	69	85	98
		Min	46	45	42	40	35	29	27	38	26	27	34	41
		Avg Max	87.5	86.1	81.6	68.7	61.5	55.7	52.8	60.5	55.5	55.7	67.9	79.5
		Avg Min	53.3	51.7	49.4	50.5	45.3	42.6	35.7	45.8	36.7	36.9	45.9	48.4
		Avg	70.4	68.9	65.5	59.6	53.4	49.2	44.3	53.2	46.1	46.3	56.9	64.0
D3 0360-01	Atascadero H.M.S.	Max	D	D	D	D	D	D	70	79	76	80	92	100
		Min	D	D	D	D	D	D	17	34	30	32	38	46
		Avg Max	D	D	D	D	D	D	60.6	68.4	65.4	66.4	74.8	82.3
		Avg Min	D	D	D	D	D	D	31.8	45.9	37.7	40.3	47.8	50.0
		Avg	D	D	D	D	D	D	46.2	57.2	51.6	53.4	61.3	66.2
D0 0674	Ben Lomond	Max	88	99	87	86	82	68	64	75	74	73	83	85
		Min	43	46	42	38	31	25	22	32	30	33	39	42
		Avg Max	78.1	84.6	78.4	73.0	68.8	58.1	56.4	65.9	60.1	61.4	69.2	75.6
		Avg Min	47.3	49.3	47.7	44.8	40.6	38.4	32.9	43.4	37.8	40.9	45.2	46.6
		Avg	62.7	67.0	63.1	58.9	54.7	48.3	44.7	54.7	49.0	51.2	57.2	61.1

TABLE A-3

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E4 0693	Berkeley	Max	72	87	78	79	77	67	63	70	68	72	78	77
		Min	50	48	51	48	39	34	33	45	39	39	45	49
		Avg Max	66.2	70.5	66.5	67.3	64.1	58.4	54.2	63.9	60.4	60.7	64.9	68.2
		Avg Min	52.0	54.8	53.4	52.6	48.9	44.0	39.5	50.8	44.9	46.6	51.4	52.6
		Avg	59.1	62.7	60.0	60.0	56.5	51.2	46.9	57.4	52.7	53.7	58.2	60.4
E7 1206	Burlingame	Max	85	86	86	78	76	65	64	69	69	71	84	79
		Min	47	47	44	41	34	29	25	36	34	35	41	42
		Avg Max	72.6	76.3	72.3	69.2	65.3	56.6	55.1	64.5	62.7	63.3	69.2	72.6
		Avg Min	52.6	54.0	50.5	50.1	45.7	42.2	35.4	47.7	41.2	43.3	49.7	48.2
		Avg	62.6	65.2	61.4	59.7	55.5	49.4	45.3	56.1	52.0	53.5	59.5	60.4
D4 1534	Carmel Valley	Max	87	104	92	92	96	83	77	81	75	73	80	83
		Min	39	42	40	36	30	27	23	38	32	36	37	39
		Avg Max	75.0	82.2	76.5	77.7	70.9	66.4	62.8	68.7	63.5	63.0	66.4	71.6
		Avg Min	46.0	48.5	47.1	47.2	42.8	39.4	35.0	45.0	38.1	41.4	46.4	46.7
		Avg	60.5	65.4	61.8	62.5	56.9	52.9	48.9	56.9	50.8	52.2	56.4	59.2
F9 1838	Cloverdale 3 SSE	Max	103	104	99	92	86	69	68	78	76	M	93	98
		Min	47	45	47	46	37	26	26	38	32	M	37	46
		Avg Max	89.1	89.0	84.5	73.4	67.5	58.6	58.9	66.3	61.8	M	73.6	81.2
		Avg Min	50.5	54.3	50.8	50.2	45.7	39.6	33.5	46.8	40.9	M	47.8	50.3
		Avg	69.8	71.7	67.7	61.8	56.6	49.1	46.2	56.6	51.4	M	60.7	65.8
F9 2105	Coyote Dam (Lake Mendocino)	Max	104	103	102	94	87	74	68	75	71	74	90	102
		Min	45	43	43	38	32	20	15	30	25	30	34	40
		Avg Max	95	90.7	89.9	76.7	69.4	62.9	58.0	64.6	61.3	59.4	71.9	83.8
		Avg Min	52.2	52.5	48.2	44.1	39.5	37.3	27.8	43.2	33.9	37.5	43.7	48.4
		Avg	73.6	71.6	69.1	60.4	54.5	50.1	42.9	53.9	47.6	48.5	57.8	66.1

TABLE A-2

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E6 2109	Coyote Reservoir	Max	96	100	98	95	85	72	66	74	70	72	90	94
		Min	45	45	41	37	28	23	18	35	30	32	35	40
		Avg Max	86.1	87.8	82.1	72.3	66.0	60.0	56.3	65.2	60.8	61.6	69.3	77.7
		Avg Min	48.3	50.7	48.1	45.6	40.2	35.9	29.5	44.6	37.1	41.0	46.5	47.6
		Avg	67.2	69.2	65.1	59.0	53.1	48.0	42.9	54.9	49.0	51.3	57.9	62.6
E4 2177	Crockett	Max	91	99	90	87	77	60	62	77	73	73	86	88
		Min	49	52	50	47	37	30	24	42	34	38	42	48
		Avg Max	81.9	84.4	79.3	70.9	66.8	54.5	51.5	64.6	62.7	62.4	69.9	76.8
		Avg Min	53.1	56.5	53.9	52.6	47.5	42.6	34.9	49.2	43.5	45.8	51.5	53.2
		Avg	67.5	70.5	66.6	61.8	57.2	48.6	43.2	56.9	53.1	54.1	60.7	65.0
D0 2290	Davenport	Max	62	88	70	76	72	67	73	73	62	66	65	66
		Min	46	47	45	45	41	38	34	43	39	41	43	43
		Avg Max	59.3	65.2	61.8	63.4	62.6	58.0	55.8	61.7	57.5	57.8	59.0	61.0
		Avg Min	48.9	51.6	49.3	50.7	50.0	45.7	42.6	49.8	44.3	45.7	49.0	49.4
		Avg	54.1	58.4	55.6	57.0	56.3	51.8	49.2	55.8	50.9	51.7	54.0	55.2
E3 2580	Duttons Landing	Max	83	94	92	87	79	64	61	72	70	70	88	84
		Min	48	51	47	43	36	26	24	40	33	34	39	47
		Avg Max	74.5	78.3	74.3	71.9	67.5	59.9	53.8	65.0	63.3	62.4	69.4	74.2
		Avg Min	52.5	55.6	51.7	50.8	42.8	42.1	33.2	47.2	41.1	42.2	49.0	51.0
		Avg	63.5	67.0	63.0	61.4	55.2	51.0	43.5	56.1	52.2	52.3	59.2	62.6
E3 2934	Fairfield Police Station	Max	100	102	98	94	78	65	64	76	74	74	91	97
		Min	50	43	49	44	31	23	24	34	33	34	39	45
		Avg Max	86.9	88.8	84.6	74.8	67.9	54.4	54.6	67.4	64.0	64.3	73.5	82.0
		Avg Min	53.8	55.5	53.0	51.5	43.7	38.5	32.5	46.3	41.7	43.7	50.1	52.5
		Avg	70.4	72.2	68.8	63.2	55.8	46.5	43.6	56.9	52.9	54.0	61.8	67.3

TABLE A-3

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
F8 3161	Fort Bragg	Max	72	71	76	73	67	68	65	70	68	66	69	68
		Min	44	43	44	41	32	32	29	39	33	35	41	43
		Avg Max	62.6	65.2	64.2	62.9	60.6	56.9	56.1	61.7	58.4	59.9	63.5	63.1
		Avg Min	47.9	50.8	49.9	48.0	44.5	42.3	37.5	48.0	41.4	43.4	47.9	47.8
		Avg	55.3	58.0	57.1	55.5	52.6	49.6	46.8	54.9	49.9	51.7	55.7	55.5
F8 3164	Fort Bragg Aviation	Max	67	69	70	69	65	66	60	70	65	64	67	67
		Min	40	40	41	38	33	28	24	37	31	33	38	39
		Avg Max	60.5	62.5	61.7	61.3	59.8	56.2	55.3	60.7	57.9	58.3	60.3	61.6
		Avg Min	45.9	49.0	47.7	46.9	43.3	41.6	36.2	46.5	40.6	42.6	46.5	45.7
		Avg	53.2	55.8	54.7	54.1	51.6	48.9	45.8	53.6	49.3	50.5	53.4	53.7
F8 3191	Fort Ross	Max	67	70	71	76	72	61	62	70	61	66	65	69
		Min	42	42	43	43	38	36	30	41	34	37	41	43
		Avg Max	61.5	64.5	64.1	62.7	61.0	55.5	54.7	60.8	57.0	58.0	61.0	62.6
		Avg Min	46.9	49.2	46.9	49.2	46.6	44.3	40.0	47.9	42.4	43.8	47.2	47.4
		Avg	54.2	56.9	55.5	56.0	53.8	49.9	47.4	54.4	49.7	50.9	54.1	55.0
D1 3238-01	Fremont Peak State Park	Max	94	96	94	92	90	80	74	77	73	72	86	92
		Min	44	52	46	40	30	28	20	40	30	29	34	41
		Avg Max	85.2	82.1	81.1	69.3	66.6	61.2	55.7	62.7	54.9	53.2	65.9	72.7
		Avg Min	66.5	33.9	61.7	52.0	47.2	45.3	38.1	47.6	39.7	40.6	50.0	53.9
		Avg	75.9	58.0	71.4	60.7	56.9	53.3	46.9	55.2	47.3	46.9	58.0	63.3
D1 3417	Gilroy	Max	98	102	101	96	86	75	69	78	78	76	89	94
		Min	46	48	45	41	32	25	18	36	31	33	38	43
		Avg Max	84.8	88.2	82.5	75.9	69.3	61.7	57.6	68.0	64.9	64.5	72.7	80.3
		Avg Min	49.7	52.2	49.9	47.8	42.2	36.8	29.8	45.7	37.9	42.4	48.1	49.8
		Avg	67.3	70.2	66.2	61.9	55.8	49.3	43.7	56.9	51.4	53.5	60.4	65.1

TABLE A-3

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
F9 3577	Graton	Max	93	98	96	90	79	64	62	72	69	71.	85	86
		Min	44	43	44	40	32	25	24	36	32	33	38	43
		Avg Max	79.1	84.0	79.1	71.5	67.2	53.9	52.8	63.1	60.3	60.1	68.1	74.9
		Avg Min	49.8	52.1	50.2	50.6	45.0	41.4	34.7	46.5	39.7	42.2	48.1	48.6
		Avg	64.4	68.0	64.6	61.0	56.1	47.6	43.8	54.8	50.0	51.2	58.1	61.8
F9 3578	Graton 1 W	Max	95	98	94	85	76	61	61	74	71	71	88	87
		Min	40	42	40	39	29	23	21	34	30	31	36	43
		Avg Max	80.9	83.7	77.1	69.2	64.2	53.7	52.4	64.1	60.7	61.4	69.4	76.5
		Avg Min	46.2	49.1	46.4	47.7	42.2	39.5	32.1	45.8	38.2	41.0	47.7	47.8
		Avg	63.6	66.4	61.8	58.5	53.2	46.6	42.3	55.0	49.5	51.2	58.6	62.2
E8 3714	Half Moon Bay 2 NNW	Max	64	86	69	75	81	69	66	68	63	64	69	66
		Min	43	47	48	45	35	33	32	40	36	39	40	42
		Avg Max	61.2	64.8	63.2	64.8	62.8	57.7	56.2	61.1	57.5	58.3	59.7	61.7
		Avg Min	49.8	52.4	51.2	49.1	45.5	44.4	39.9	48.0	42.5	45.9	49.3	48.7
		Avg	55.5	58.6	57.2	57.0	54.2	51.1	48.1	54.6	50.0	52.1	54.5	55.2
E2 3734	Hamilton Air Force Base	Max	90	95	88	82	74	62	61	71	68	70	82	83
		Min	45	45	45	41	36	26	23	39	31	35	40	46
		Avg Max	74.0	79.5	73.0	68.7	63.8	53.3	51.5	64.0	61.5	59.8	67.8	73.5
		Avg Min	48.8	52.1	49.2	50.1	45.3	41.0	33.2	47.9	42.4	44.6	50.4	50.9
		Avg	61.4	65.8	61.1	59.4	54.6	47.2	42.4	56.0	52.0	52.2	59.1	62.2
F9 3875	Healdsburg	Max	101	105	101	95	83	62	69	78	76	76	93	97
		Min	46	45	44	42	37	26	23	38	32	34	39	44
		Avg Max	87.6	89.9	85.0	74.5	68.8	56.9	56.9	67.8	64.4	64.0	73.7	82.6
		Avg Min	50.2	52.9	50.0	48.8	44.9	40.4	33.7	48.4	41.0	43.0	49.2	51.9
		Avg	68.9	71.4	67.5	61.7	56.9	48.7	45.3	58.1	52.7	53.5	61.5	67.3

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MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
D1 4022	Hollister	Max	89	102	95	92	89	77	69	78	78	76	87	86
		Min	42	44	40	34	26	20	16	35	30	32	37	42
		Avg Max	77.6	83.3	78.0	76.1	69.7	64.3	59.8	68.3	64.5	64.0	68.9	73.8
		Avg Min	45.9	48.1	45.6	43.2	37.6	33.8	29.3	46.9	38.4	42.1	47.9	48.1
		Avg	61.8	65.7	61.8	59.7	53.7	49.1	44.6	57.6	51.5	53.1	58.4	61.0
E2 4500	Kentfield	Max	89	98	98	89	80	66	65	72	72	72	87	88
		Min	45	40	45	43	38	27	25	39	33	35	40	45
		Avg Max	79.4	82.0	77.7	71.1	67.0	58.0	54.4	65.0	61.9	62.2	68.6	75.6
		Avg Min	48.5	50.9	49.0	49.6	45.8	40.7	34.0	47.5	41.4	44.3	49.4	49.8
		Avg	64.0	66.5	63.4	60.4	56.4	49.4	44.2	56.3	51.7	53.3	59.0	62.7
D2 4555	King City	Max	88	102	94	96	89	79	75	78	78	79	88	92
		Min	41	45	42	38	27	23	18	34	30	32	37	39
		Avg Max	81.0	85.7	80.3	79.2	72.3	67.4	61.6	70.9	67.8	67.5	74.7	80.1
		Avg Min	49.9	51.0	49.5	46.3	38.6	36.7	30.9	45.6	37.8	41.7	47.5	48.7
		Avg	65.5	68.4	64.9	62.8	55.5	52.1	46.3	58.3	52.8	54.6	61.1	64.4
E6 4922	Lexington Reservoir	Max	95	98	91	91	80	65	65	73	72	78	88	89
		Min	43	45	42	37	32	26	22	35	31	32	38	41
		Avg Max	85.1	85.9	81.5	70.5	64.9	58.1	54.7	64.7	61.2	61.7	69.4	78.5
		Avg Min	48.5	50.0	47.9	45.4	43.5	39.6	33.8	45.9	38.5	41.4	47.8	48.0
		Avg	66.8	68.0	64.7	60.0	54.2	48.8	44.2	55.3	49.8	51.6	58.6	63.2
D3 4963	Linn Ranch	Max	101	103	96	98	82	71	64	D	D	75	90	98
		Min	45	45	43	40	26	22	17	D	D	32	37	44
		Avg Max	92.8	91.5	86.2	75.2	66.9	61.2	55.8	D	D	63.4	72.5	81.6
		Avg Min	50.3	54.2	50.4	47.8	39.5	35.8	30.8	D	D	39.2	48.0	49.9
		Avg	71.6	72.8	68.3	61.5	53.2	48.5	43.3	D	D	51.3	60.2	65.8

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E5 4996	Livermore Sewage Plant	Max	99	100	97	98	78	67	65	74	72	72	88	97
		Min	44	45	41	38	30	20	19	33	29	24	35	43
		Avg Max	85.5	85.6	82.2	72.7	67.0	58.3	54.4	66.6	62.8	62.3	71.0	80.7
		Avg Min	49.4	50.7	47.9	46.5	38.8	35.8	28.3	44.1	37.1	39.1	45.8	46.9
		Avg	67.4	68.2	65.0	59.6	52.9	47.0	41.4	55.4	50.0	50.7	58.4	63.8
E5 4997	Livermore 2 SSW	Max	101	103	98	95	78	68	65	75	71	72	91	100
		Min	45	47	45	41	30	22	21	33	30	31	37	42
		Avg Max	89.3	88.0	83.9	72.6	66.7	58.7	54.4	65.3	61.8	61.1	71.2	81.4
		Avg Min	50.5	52.0	50.2	46.6	39.9	33.8	28.9	44.1	36.6	40.1	46.8	47.7
		Avg	69.9	70.0	67.1	59.6	53.3	46.3	41.7	54.7	49.2	50.6	59.0	64.6
E6 5123	Los Gatos	Max	91	97	90	87	78	67	63	75	73	70	87	89
		Min	48	48	45	41	33	29	25	38	34	30	41	45
		Avg Max	83.0	83.1	79.4	71.6	66.3	58.5	55.6	65.8	62.5	62.1	70.5	78.0
		Avg Min	50.9	52.3	49.7	47.4	43.6	38.7	32.4	45.7	37.7	39.2	47.8	49.2
		Avg	67.0	67.7	64.6	59.5	55.0	48.6	44.0	55.8	50.1	50.7	59.2	63.6
E3 5333	Mare Island Naval Ship Yard	Max	85	95	89	85	71	65	69	71	70	79	92	88
		Min	54	55	54	51	40	31	33	47	39	40	46	54
		Avg Max	78.2	82.3	75.9	71.7	66.5	54.1	51.9	64.8	62.7	66.0	74.3	78.8
		Avg Min	56.2	59.9	58.1	56.3	51.5	45.0	40.0	52.3	46.9	49.0	59.4	57.6
		Avg	67.2	71.1	67.0	64.0	59.0	49.6	46.0	58.6	54.8	57.5	66.8	68.2
E4 5377	Martinez Fire Station	Max	94	100	95	90	80	64	61	72	73	74	89	93
		Min	49	49	49	44	36	28	26	39	33	36	41	48
		Avg Max	84.8	85.7	80.2	71.4	66.0	53.5	50.8	64.2	62.7	62.7	71.9	80.0
		Avg Min	53.4	55.4	52.2	50.7	45.0	40.5	32.4	46.9	41.8	44.4	50.2	52.9
		Avg	69.1	70.6	66.2	61.1	55.5	47.0	41.6	55.6	52.3	53.6	61.1	66.5

TABLE A-3

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
D4 5795	Monterey	Max	75	95	85	87	90	80	76	72	70	NR	NR	NR
		Min	47	49	47	46	41	32	28	42	37	NR	NR	NR
		Avg Max	64.5	71.5	67.0	71.4	67.9	63.9	60.6	66.2	62.6	NR	NR	NR
		Avg Min	49.6	51.9	50.0	50.6	47.0	43.8	40.5	48.9	42.9	NR	NR	NR
		Avg	57.1	61.7	58.5	61.0	57.5	53.9	50.6	57.6	52.8	NR	NR	NR
E4 5915	Mt. Diablo North Gate	Max	96	100	95	90	81	72	68	72	71	70	86	96
		Min	43	42	41	41	36	29	24	41	29	30	37	43
		Avg Max	88.7	86.2	83.6	69.9	65.3	59.7	53.8	61.9	57.8	55.7	66.9	78.5
		Avg Min	62.4	57.7	53.0	49.8	46.5	44.0	37.2	47.1	38.7	38.3	45.0	50.2
		Avg	75.6	72.0	68.3	59.9	55.9	51.9	45.5	54.5	48.3	47.0	56.0	64.4
E5 5933	Mt. Hamilton	Max	D	89	84	80	79	70	62	65	62	62	78	87
		Min	D	44	44	35	28	24	18	35	25	24	32	37
		Avg Max	D	77.7	75.3	65.0	57.1	54.7	49.5	55.6	46.6	45.4	61.1	68.9
		Avg Min	D	60.5	58.2	51.0	43.2	43.2	36.5	42.9	33.0	33.4	45.3	50.2
		Avg	D	69.1	66.8	58.0	50.2	49.0	43.0	49.3	39.8	39.4	53.2	59.6
E3 6068	Napa - Haven	Max	96	104	98	90	82	64	64	72	72	73	89	90
		Min	46	46	41	60	30	22	20	36	30	30	36	42
		Avg Max	81	84.5	79.1	73.2	67.7	57.8	54.3	65.2	63.2	63.2	70.2	79.0
		Avg Min	49.3	51.0	49.0	48.3	42.4	37.9	30.5	44.7	37.5	40.4	46.9	48.1
		Avg	65.2	67.8	64.0	60.8	55.0	47.8	42.4	55.0	50.4	51.8	58.6	63.6
E3 6074	Napa State Hospital	Max	91	99	97	92	84	65	64	75	74	74	89	89
		Min	48	46	45	40	34	25	20	38	25	30	37	42
		Avg Max	78.5	83.1	78.5	74.1	67.8	58.4	55.2	66.9	64.2	64.1	71.4	78.4
		Avg Min	50.7	51.2	50.5	50.3	43.7	40.1	32.0	46.6	38.0	38.6	47.9	49.2
		Avg	64.6	67.2	64.5	62.2	55.8	49.3	43.6	56.8	51.1	51.4	59.7	63.8

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E5 6144	Newark	Max	82	95	89	86	83	69	63	74	69	69	84	85
		Min	49	52	48	44	33	28	24	40	37	37	43	46
		Avg Max	74.5	77.9	73.6	70.9	66.2	56.7	53.6	64.4	62.0	61.4	67.3	73.1
		Avg Min	52.3	54.8	53.8	52.6	46.1	41.8	35.1	49.0	42.6	46.5	51.6	52.3
		Avg	63.4	66.4	63.7	61.8	56.2	49.3	44.4	56.7	52.3	54.0	59.5	62.7
E4 6335	Oakland WB AP	Max	79	95	88	84	77	63	63	72	68	67	86	80
		Min	50	53	50	48	37	32	30	42	37	38	45	49
		Avg Max	69.5	74.1	69.9	68.2	64.9	56.0	54.3	64.4	60.8	60.9	65.7	69.9
		Avg Min	53.8	56.3	54.9	53.1	47.1	43.0	37.9	49.8	44.2	47.3	52.7	53.4
		Avg	61.7	65.2	62.4	60.7	56.0	49.5	46.1	57.1	52.5	54.1	59.2	61.7
E3 6646	Palo Alto City Hall	Max	81	96	87	83	79	66	63	74	70		87	84
		Min	47	49	46	41	30	26	21	37	32	34	40	44
		Avg Max	73.8	78.8	73.2	70.1	64.6	56.0	53.4	64.8	62.6	62.5	69.0	75.5
		Avg Min	53.8	53.5	51.3	48.5	42.5	40.7	33.4	47.4	40.7	45.6	50.5	52.1
		Avg	63.8	66.2	62.3	59.3	53.6	48.4	43.4	56.1	51.7	54.1	59.8	63.8
E2 6826	Petaluma F.S. No. 2	Max	90	100	98	95	78	66	67	72	71	74	86	89
		Min	43	41	42	42	34	24	20	35	29	32	37	45
		Avg Max	82.1	84.4	82.0	73.3	68.4	57.5	55.9	65.4	63.2	62.6	69.0	76.4
		Avg Min	49.0	51.4	49.2	49.4	43.5	39.8	31.4	46.6	38.3	41.7	47.7	49.3
		Avg	65.6	67.9	65.6	61.4	56.0	48.7	43.7	56.0	50.8	52.2	58.4	62.9
D2 6926	Pinnacles National Mon.	Max	103	105	99	96	92	81	74	79	78	78	95	101
		Min	40	43	40	35	28	19	15	33	27	28	33	34
		Avg Max	96.4	95.9	91.7	82.1	73.0	67.8	62.6	69.5	64.4	64.2	76.5	85.2
		Avg Min	47.8	50.0	46.7	43.8	39.0	35.0	28.1	41.8	34.4	37.5	44.3	44.5
		Avg	72.1	73.0	69.2	63.0	56.0	51.4	45.4	55.7	49.4	50.9	60.4	64.9

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MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E5 6991-05	Pleasanton Nursery	Max	104	102	98	92	82	68	66	77	74	74	90	100
		Min	46	44	43	38	28	21	19	33	28	32	36	42
		Avg Max	90.3	89.1	84.2	72.1	66.8	58.5	55.5	66.8	62.7	61.8	71.6	82.3
		Avg Min	50.7	52.0	48.6	46.5	38.7	37.4	28.7	45.6	38.1	41.8	48.3	49.0
		Avg	70.5	70.6	66.4	59.3	52.8	48.0	42.1	56.2	50.4	51.8	60.0	65.6
F8 7009	Point Arena	Max	68	72	75	74	69	63	65	66	62	65	66	67
		Min	44	43	41	38	38	30	28	37	31	33	38	42
		Avg Max	62.8	65.1	63.6	62.9	60.4	55.9	55.4	60.2	57.4	58.3	61.7	62.4
		Avg Min	47.8	50.4	48.5	47.1	43.4	41.8	36.3	47.3	41.0	42.5	46.8	47.0
		Avg	55.3	57.8	56.1	55.0	51.9	48.9	45.9	53.8	49.2	50.4	54.3	54.7
D5 7024	Point Piedras Blancas	Max	68	71	68	73	76		73	70	68	65	65	70
		Min	46	48	49	47	40		38	45	39	38	44	43
		Avg Max	63.6	66.5	62.8	65.1	62.8	60.1	60.0	63.0	60.8	60.5	61.8	64.5
		Avg Min	51.1	51.6	51.4	51.6	49.0	48.1	46.0	50.5	45.2	46.3	48.7	49.5
		Avg	57.4	59.1	57.1	58.4	55.9	54.1	53.0	56.8	53.0	53.4	55.3	57.0
E4 7070	Port Chicago NAD	Max	94	101	91	83	76	64	62	72	74	73	89	97
		Min	44	48	40	38	30	23	21	31	30	31	37	45
		Avg Max	82.7	87.6	77.4	69.2	65.0	54.6	52.6	65.4	62.9	63.3	71.7	80.1
		Avg Min	50.0	53.3	47.7	46.3	40.2	38.5	29.5	43.5	36.8	40.8	47.9	50.6
		Avg	66.4	70.5	62.6	57.8	52.6	46.6	41.1	54.5	49.9	52.1	59.8	65.4
F9 7109	Potter Valley P.H.	Max	105	101	100	91	85	73	69	75	73	75	92	NR
		Min	42	42	41	36	24	18	17	28	24	29	34	NR
		Avg Max	M	93.3	91.5	75.4	66.2	M	61.6	66.4	61.6	59.2	75.8	NR
		Avg Min	M	49.8	46.2	42.7	37.0	34.6	25.4	42.5	34.6	39.4	44.7	NR
		Avg	M	71.6	68.9	59.1	51.6	M	43.5	54.5	48.1	49.3	60.3	NR

TABLE A-5

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
D2 7150	Priest Valley	Max	100	105	98	94	82	78	66	75	72	72	91	98
		Min	40	39	35	31	16	17	9	26	21	25	30	33
		Avg Max	94.1	93.5	88.9	76.4	66.4	62.1	57.0	65.2	59.9	59.9	72.0	82.1
		Avg Min	47.4	47.2	43.1	38.3	29.5	29.3	21.5	37.4	30.1	34.0	41.5	42.9
		Avg	70.8	70.4	66.0	57.4	48.0	45.7	39.3	51.3	45.0	47.0	56.8	62.5
D1 7190	Quien Sabe Hay Camp	Max	97	97	95	91	89	75	71	80	71	74	89	92
		Min	42	40	38	32	27	20	10	27	19	26	28	30
		Avg Max	88.6	86.0	81.3	74.9	65.0	62.7	57.8	65.9	59.2	60.0	67.4	73.5
		Avg Min	47.5	47.0	44.8	41.0	36.9	33.1	25.0	39.8	31.7	37.3	42.7	43.0
		Avg	68.0	66.5	63.0	58.0	51.0	48.0	44.4	52.8	45.4	48.6	55.0	58.2
E7 7339	Redwood City	Max	89	98	92	85	82	67	67	74	72	74	90	91
		Min	46	48	46	43	34	27	24	38	34	36	41	46
		Avg Max	80.7	84.5	79.2	72.2	67.8	58.9	56.1	67.1	65.2	65.6	73.2	79.6
		Avg Min	52.8	52.1	50.9	49.3	44.4	41.3	35.2	47.4	41.3	44.7	50.1	51.2
		Avg	66.8	68.3	65.1	60.8	56.1	50.1	45.7	57.3	53.3	55.2	61.7	65.4
D4 7539-01	Roosevelt Ranch	Max	78	95	86	88	84	76	72	75	72	70	76	81
		Min	49	50	51	50	44	44	42	47	41	41	48	49
		Avg Max	66.1	76.6	71.2	71.4	66.3	60.4	60.4	63.7	60.2	61.1	63.9	67.1
		Avg Min	52.8	60.2	56.4	54.1	54.7	50.0	47.5	51.8	47.2	48.2	53.3	53.3
		Avg	59.4	68.4	63.8	62.8	60.5	55.2	54.0	57.8	53.7	54.6	58.6	60.2
E4 7414	Richmond	Max	71	91	82	82	82	70	65	71	70	71	82	77
		Min	52	53	52	50	39	32	30	41	36	38	45	51
		Avg Max	65.3	69.8	67.8	69.5	66.5	59.4	55.3	65.5	62.4	61.4	66.3	68.3
		Avg Min	53.4	56.4	54.4	53.4	49.1	43.9	38.4	49.8	45.2	46.9	53.4	54.4
		Avg	59.4	63.1	61.1	61.5	57.8	51.7	46.9	57.7	53.8	54.2	59.9	61.4

TABLE A-3

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E3 7646	Saint Helena	Max	101	106	101	94	86	67	70	75	75	77	92	96
		Min	46	42	42	38	31	22	21	35	28	31	35	45
		Avg Max	88.9	89.2	84.2	74.4	67.6	57.3	56.2	67.0	63.4	63.3	73.0	82.5
		Avg Min	49.2	51.1	48.4	48.5	41.4	37.9	30.7	44.8	37.1	40.6	48.7	50.4
		Avg	69.1	70.2	66.3	61.5	54.5	47.6	43.5	55.9	50.3	52.0	60.9	66.5
E4 7661	Saint Mary's College	Max	98	100	94	89	75	65	61	71	72	70	91	96
		Min	48	46	43	38	27	21	20	33	27	29	36	41
		Avg Max	82.2	83.5	78.3	70.8	64.4	54.2	52.0	64.0	60.3	60.5	68.6	76.6
		Avg Min	51.2	52.3	50.9	44.8	37.9	35.6	29.6	44.1	37.0	40.6	47.7	49.8
		Avg	66.7	67.9	64.6	57.8	51.2	44.9	40.8	54.1	48.7	50.6	58.2	63.2
D2 7668	Salinas 2 E	Max	74	95	88	89	92	81	74	81	75	72	76	75
		Min	49	46	46	41	32	29	22	36	29	36	39	43
		Avg Max	66.5	75.1	70.0	74.8	71.1	65.5	60.8	67.8	63.2	63.4	66.6	68.5
		Avg Min	51.6	52.5	51.1	49.4	42.3	40.8	35.1	46.4	39.9	44.0	49.7	51.2
		Avg	59.1	63.8	60.6	62.1	56.7	53.2	48.0	57.1	51.6	53.7	58.2	59.9
D2 7669	Salinas FAA Airport	Max	75	95	87	89	92	81	74	76	76	73	79	76
		Min	47	46	47	43	33	32	25	38	32	37	40	44
		Avg Max	67.5	74.6	69.2	73.6	68.3	63.2	60.2	67.0	63.6	64.2	68.0	70.1
		Avg Min	51.9	52.7	51.9	50.4	43.9	42.4	37.3	48.1	40.8	45.2	51.2	52.4
		Avg	59.7	63.7	60.6	62.0	56.1	52.8	48.8	57.6	52.2	54.7	59.6	61.3
D3 7714	San Antonio Mission	Max	105	107	102	97	88	79	70	79	77	77	92	102
		Min	40	38	38	32	20	19	12	30	27	28	30	36
		Avg Max	98.7	97.5	93.2	80.2	73.0	67.0	62.8	70.4	68.0	65.7	76.9	87.5
		Avg Min	46.0	46.1	42.4	39.5	33.1	31.2	25.0	39.3	32.5	36.7	44.0	43.4
		Avg	72.4	71.8	67.8	59.0	53.1	49.1	43.9	54.9	50.3	51.2	60.5	65.5

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E8 7767	San Francisco Richmond Sunset	Max	70	73	69	74	83	66	68	72	64	72	77	68
		Min	47	50	50	45	35	32	30	42	37	39	43	45
		Avg Max	60.2	65.3	61.2	64.4	63.3	59.3	57.7	61.6	58.4	61.3	61.5	61.7
		Avg Min	50.9	54.4	53.1	50.3	48.4	45.3	39.9	49.9	42.7	47.6	50.8	50.9
		Avg	55.6	59.9	57.2	57.4	55.9	52.3	48.8	55.8	50.6	54.5	56.2	56.3
E7 7769	San Francisco WB AP	Max	78	92	86	80	79	64	64	70	68	67	78	76
		Min	49	51	48	47	37	31	29	41	38	39	43	46
		Avg Max	69.1	73.2	69.4	67.2	63.8	55.7	53.5	62.8	59.7	59.4	63.6	67.5
		Avg Min	51.2	53.9	52.5	52.0	47.6	43.5	37.6	48.9	44.0	46.5	50.0	49.7
		Avg	60.2	63.6	61.0	59.6	55.7	49.6	45.6	55.9	51.9	53.0	56.8	58.6
E7 7772	San Francisco F.O.B.	Max	67	86	77	79	81	65	66	72	68	67	77	71
		Min	49	50	50	52	46	41	41	47	41	42	49	49
		Avg Max	60.5	65.9	63.4	66.7	64.9	57.7	55.4	63.9	59.8	59.2	62.1	63.7
		Avg Min	51.4	54.0	53.2	54.8	52.7	48.0	45.4	52.8	48.4	49.5	52.3	52.4
		Avg	56.0	60.0	58.3	60.8	58.8	52.9	50.4	58.4	54.1	54.5	57.2	58.1
E8 7807	San Gregorio 3 SE	Max	72	90	85	82	86	75	70	75	65	67	73	75
		Min	38	41	41	38	28	27	23	35	30	33	38	38
		Avg Max	65.9	71.2	66.6	68.3	65.4	61.1	57.9	64.6	59.8	59.4	61.6	64.6
		Avg Mln	46.3	49.0	48.1	45.7	41.0	39.8	34.0	46.3	38.2	42.7	48.2	47.4
		Avg	56.1	60.1	57.4	57.0	53.2	50.5	46.0	55.5	49.0	51.1	54.9	56.0
E6 7821	San Jose	Max	88	95	92	87	84	71	68	76	74	72	84	89
		Mln	51	52	50	47	36	31	27	42	38	38	44	49
		Avg Max	79.0	81.7	77.6	71.6	67.2	58.8	57.1	67.3	64.2	63.4	70.6	77.6
		Avg Min	54.2	56.7	54.4	53.1	48.4	43.8	38.7	50.6	44.5	47.3	52.8	53.4
		Avg	66.6	69.2	66.0	62.4	57.8	51.3	47.9	59.0	54.4	55.4	61.7	65.5

TABLE A-3

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E6 7824	San Jose Decid. F.F.S.	Max	90	98	87	91	85	69	68	78	75	74	91	91
		Min	49	50	48	44	33	30	27	40	36	37	45	46
		Avg Max	82.0	83.7	78.5	72.7	68.3	58.6	57.1	68.5	65.2	65.7	71.2	79.2
		Avg Min	53.2	54.9	52.6	51.3	43.6	42.1	36.3	49.4	42.5	46.6	52.4	52.2
		Avg	67.6	69.3	65.6	62.0	56.0	50.4	46.7	59.0	53.8	56.2	61.8	65.7
E7 7864	San Mateo	Max	85	95	95	85	83	67	67	75	71	71	85	83
		Min	50	49	50	48	39	30	31	42	39	41	46	49
		Avg Max	74.8	78.3	74.1	70.4	66.8	59.5	56.6	66.4	63.3	62.6	68.0	72.1
		Avg Min	53.1	55.2	53.7	53.5	48.7	44.6	39.2	50.3	45.5	47.1	52.2	52.3
		Avg	64.0	66.8	63.9	62.0	57.8	52.1	47.9	58.4	54.4	54.9	60.1	62.2
E2 7880	San Rafael	Max	88	NR	89	89	80	66	67	74	73	73	89	90
		Min	45	NR	48	46	39	31	29	43	36	38	42	46
		Avg Max	79.4	NR	77.3	74.0	67.6	59.4	56.4	67.1	63.6	62.7	71.0	75.6
		Avg Min	50.6	NR	52.0	52.5	48.1	42.9	37.8	49.9	43.3	46.2	50.1	51.2
		Avg	65.0	NR	64.7	63.3	57.9	51.2	47.1	58.5	53.5	54.5	60.6	63.4
E6 7912	Santa Clara University	Max	88	95	91	88	83	70	67	76	73	73	89	90
		Min	49	52	48	42	33	30	25	40	36	35	42	46
		Avg Max	80.5	82.3	77.7	72.3	67.3	57.9	57.0	68.1	64.2	64.7	72.3	78.8
		Avg Min	52.8	54.9	52.1	50.7	45.1	40.9	35.1	48.0	41.7	44.6	50.5	51.8
		Avg	66.7	68.6	64.9	61.5	56.2	49.4	46.1	58.1	53.0	54.7	61.4	65.3
D0 7916	Santa Cruz	Max	76	103	89	84	88	77	76	75	73	73	78	86
		Min	44	45	43	38	33	26	22	35	32	31	40	41
		Avg Max	69.6	79.1	72.7	73.2	67.2	60.7	59.3	66.2	63.7	62.8	67.6	72.5
		Avg Min	49.9	49.8	47.2	45.5	41.7	40.0	34.6	45.7	39.5	42.2	47.9	47.9
		Avg	59.8	64.5	60.0	59.4	54.5	50.4	47.0	56.0	51.6	52.5	57.8	60.2

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
F9 7965	Santa Rosa	Max	94	99	99	92	83	68	67	75	75	74	89	91
		Min	43	42	43	39	30	23	21	36	29	31	36	44
		Avg Max	81.2	84.8	81.4	72.9	68.5	57.0	55.4	66.5	64.5	63.5	70.5	78.5
		Avg Min	48.1	50.5	47.8	46.9	39.8	37.3	30.6	44.5	36.5	39.5	47.3	48.3
		Avg	64.7	67.7	64.6	59.9	54.2	47.2	43.0	55.5	50.5	51.5	58.9	63.4
F9 7964	Santa Rosa Sewage Plant	Max	86	95	91	85	76	61	60	68	63	71	80	83
		Min	42	39	40	36	29	21	20	33	28	31	34	43
		Avg Max	73.4	78.0	73.3	67.2	62.3	53.3	50.4	60.8	55.8	55.6	61.5	72.3
		Avg Min	47.6	49.6	46.2	47.0	40.5	36.5	31.5	44.0	36.3	39.4	44.7	47.6
		Avg	60.5	63.8	59.8	57.1	51.4	44.9	41.0	52.4	46.0	47.5	53.1	60.0
F8 8162	Shelter Cove	Max	86	74	71	70	63	62	68	66	62	60	65	74
		Min	36	47	47	45	42	41	39	45	38	39	43	44
		Avg Max	65.1	64.4	61.5	60.5	58.2	56.7	55.6	59.0	55.8	55.6	59.7	66.3
		Avg Min	49.4	52.6	50.0	50.5	48.3	46.7	43.5	49.9	45.2	47.2	50.2	51.6
		Avg	57.3	58.5	55.8	55.5	53.3	51.7	49.6	54.5	50.5	51.4	55.0	59.0
D2 8446-01	Spreckels Sugar Company	Max	69	94	84	86	90	80	69	75	75	71	76	76
		Min	46	45	47	40	32	28	22	36	30	38	40	42
		Avg Max	65.7	73.2	68.7	72.6	66.6	64.3	60.7	66.1	63.4	62.8	66.5	67.7
		Avg Min	50.9	52.3	51.0	48.5	42.7	41.3	33.5	46.1	39.5	44.2	49.5	51.7
		Avg	58.3	62.8	59.8	60.6	54.6	52.8	47.1	56.1	51.4	53.5	58.0	59.7
D2 8338-01	Soledad C.T.F.	Max	80	95	81	89	89	80	70	76	74	73	79	82
		Min	42	43	42	39	30	27	20	36	29	32	38	40
		Avg Max	72.7	77.5	71.9	74.7	69.5	64.5	59.1	66.9	63.6	63.6	68.1	71.8
		Avg Min	50.3	51.0	49.0	45.5	41.8	39.1	33.2	48.2	38.3	42.0	47.5	49.2
		Avg	61.5	64.2	60.4	60.1	55.6	51.8	46.2	57.6	50.0	52.8	57.8	60.5

TABLE A-3

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E2 8351	Sonoma	Max	100	102	100	93	80	66	62	76	72	75	89	98
		Min	43	42	40	38	30	22	20	35	29	30	35	42
		Avg Max	88.5	89.2	84.0	73.5	67.1	56.3	54.4	67.6	64.2	64.3	73.2	82.3
		Avg Min	47.6	49.5	47.1	48.4	41.1	38.9	30.9	45.3	37.8	40.6	47.2	48.3
		Avg	68.1	69.4	65.6	61.0	54.1	47.6	42.7	56.5	51.0	52.5	60.2	65.3
D3 8849	Templeton	Max	103	105	100	95	87	77	72	79	76	78	92	98
		Min	45	43	40	39	22	19	17	37	29	31	38	42
		Avg Max	89.3	92.5	86.6	77.2	69.5	63.9	60.0	68.3	63.5	63.6	71.9	79.9
		Avg Min	49.0	50.4	47.3	45.8	37.8	36.4	31.0	46.7	37.5	40.8	48.8	48.2
		Avg	69.2	71.4	67.0	61.5	53.7	50.2	45.5	57.5	50.5	52.2	60.4	40.5
F9 9122	Ukiah	Max	104	103	101	93	85	70	68	77	73	78	95	104
		Min	49	46	46	38	28	21	19	33	29	32	38	42
		Avg Max	95.1	90.6	89.5	74.6	65.8	60.9	59.0	66.6	61.7	62.0	75.9	84.0
		Avg Min	53.7	54.2	50.5	47.0	41.3	37.3	31.1	45.6	37.0	39.7	48.0	51.0
		Avg	74.4	72.4	70.0	60.8	53.6	49.1	45.1	56.1	49.4	50.9	62.0	67.5
E4 9185	Upper San Leandro Filters	Max	80	92	87	88	79	69	63	74	72	69	85	84
		Min	47	52	49	45	34	32	31	41	35	35	42	47
		Avg Max	71.1	74.4	71.1	69.4	65.2	58.5	54.7	64.7	61.7	60.4	66.0	70.3
		Avg Min	50.1	53.7	52.2	50.7	46.3	41.9	37.9	48.9	41.9	43.6	49.5	50.4
		Avg	60.6	64.1	61.7	60.1	55.8	50.2	46.3	56.8	51.8	52.0	57.8	60.4
E3 9305	Veterans Home	Max	100	102	96	90	76	68	60	80	72	76	92	98
		Min	48	40	44	40	36	26	26	40	32	32	40	46
		Avg Max	87.8	88.1	81.5	72.4	66.1	58.1	54.5	64.7	61.8	65.8	76.8	85.7
		Avg Min	51.5	52.9	51.6	51.4	44.9	40.7	34.8	48.2	41.6	42.7	50.7	51.6
		Avg	69.6	70.5	66.6	61.9	55.5	49.4	44.6	56.4	51.7	54.2	63.8	68.6

TABLE A-3

MONTHLY TEMPERATURES

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E4 9423	Walnut Creek 2 ESE	Max	100	102	96	94	81	64	65	76	76	76	91	100
		Min	46	48	44	40	27	21	20	33	30	31	38	41
		Avg Max	88.2	87.2	83.2	72.6	67.4	55.1	53.9	66.0	64.4	64.1	71.9	80.6
		Avg Min	50.9	52.7	50.4	46.5	39.5	36.9	29.1	44.6	37.8	41.6	48.4	48.8
		Avg	69.6	70.0	66.8	59.6	53.5	46.0	41.5	55.3	51.1	52.9	60.2	64.7
D1 9473	Watsonville WW	Max	87	91	84	84	90	76	70	76	75	72	75	79
		Min	46	45	45	42	33	27	26	37	33	34	38	41
		Avg Max	67.7	72.6	66.6	71.5	67.8	63.6	58.6	65.8	62.3	62.0	65.2	67.6
		Avg Min	50.3	51.5	50.2	48.3	42.7	40.3	34.7	47.1	40.4	43.2	48.1	48.9
		Avg	59.0	62.1	58.4	59.9	55.3	52.0	46.7	56.5	51.4	52.6	56.7	58.3
F9 9770	Woodacre	Max	96	100	99	92	76	66	65	73	71	72	88	95
		Min	41	43	39	37	26	21	18	31	28	31	36	40
		Avg Max	85.0	85.6	81.4	70.1	65.1	56.6	54.0	64.3	60.6	57.6	67.6	75.9
		Avg Min	48.1	49.4	48.0	46.6	39.7	36.4	29.8	44.0	38.5	41.0	48.4	46.3
		Avg	66.6	67.5	64.7	58.4	52.4	46.5	41.9	54.2	49.6	49.3	58.0	61.1
E3 9675 41	Wild Horse Valley	Max	92	96	93	86	76	70	70	74	70	76	86	92
		Min	45	48	48	47	40	28	30	40	32	34	41	48
		Avg Max	82.1	82.8	77.8	71.0	65.5	60.3	57.0	67.2	62.4	64.5	71.6	78.2
		Avg Min	55.5	56.5	53.4	50.5	47.5	43.5	37.5	49.0	42.9	44.5	48.3	53.1
		Avg	68.8	69.6	65.6	60.8	56.5	51.9	47.2	58.1	52.6	54.5	60.0	65.6
		Max												
		Min												
		Avg Max												
		Avg Min												
		Avg												

TABLE A-4

MONTHLY EVAPORATION

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
E6 0053	Alamitos Perc. Pond	Evap	8.97	9.09	6.15	3.35	2.14	.99	1.44	2.03	3.39	4.11	6.59	9.21
		Wind Movement	1486	1599	1329	1571	979	959	1470	1290	1571	1730	1663	1910
		Water Temp Avg Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp Avg Min	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Precip.	0	0	T	7.37	.13	2.11	4.45	2.91	3.27	3.26	.42	T
		Air Temp Max	90	96	93	88	82	73	65	77	75	73	89	93
		Air Temp Min	48	47	37	37	31	28	22	37	34	35	39	44
		Air Temp Avg Max	80.7	82.3	78.4	71.7	66.3	59.4	55.7	67.0	63.5	63.4	70.5	80.0
		Air Temp Avg Min	51.6	53.6	49.1	47.1	43.3	39.0	34.0	45.7	40.3	44.3	49.4	50.4
		Air Temp Avg	66.2	68.0	63.8	59.4	54.8	49.2	44.9	56.0	51.9	53.9	60.0	65.2
E7 1206	Burlingame	Evap	7.84	7.53	5.09	3.09	1.59	.89	1.32	1.46	2.98	3.70	5.58	7.29
		Wind Movement	2908	1908	1142	1138	490	309	703	560	990	1200	1310	1390
		Water Temp Avg Max	79.7	84.1	80.5	73.0	67.8	60.0	55.1	69.1	70.4	74.5	81.4	84.8
		Water Temp Avg Min	53.3	55.5	55.7	53.5	47.9	45.7	40.5	51.1	45.4	48.5	53.5	55.3
		Precip	0	.04	0	6.68	.37	2.81	3.63	3.15	4.17	3.66	.45	0
		Air Temp Max.	85	86	86	78	76	65	64	69	69	71	84	79
		Air Temp Min.	47	47	44	41	34	29	25	36	34	35	41	42
		Air Temp Avg Max.	72.6	76.3	72.3	69.2	65.3	56.6	55.1	64.5	62.7	63.3	69.2	72.6
		Air Temp Avg Min	52.6	54.0	50.5	50.1	45.7	42.2	35.4	47.7	41.2	43.3	49.7	48.2
		Air Temp Avg	62.6	65.2	61.4	59.7	55.5	49.4	45.3	56.1	52.0	53.5	59.5	60.4
F9 2105	Coyote Dam (Lake Mendocino)	Evap	12.75	9.95	7.67	3.21	1.80	1.10	1.20	2.11	3.11	3.63	5.97	9.28
		Wind Movement	1654	1583	1154	781	347	164	310	534	1146	1404	1348	1692
		Water Temp. Avg Max	86.7	83.5	79.6	67.8	60.1	53.9	49.6	59.9	60.3	61.1	75.2	83.2
		Water Temp. Avg Min	54.0	54.6	50.8	48.5	41.0	41.0	32.1	47.5	37.3	41.5	48.2	51.6
		Precip.	0	.16	.51	8.60	2.72	5.15	4.20	5.04	5.87	7.37	.80	.18
		Air Temp Max	104	103	102	94	87	74	68	75	71	74	90	102
		Air Temp Min.	45	43	43	38	32	20	15	30	25	30	34	40
		Air Temp Avg. Max.	95.0	90.7	89.9	76.7	69.4	62.9	58.0	64.6	61.3	59.4	71.9	83.8
		Air Temp Avg Min	52.2	52.5	48.2	44.1	39.5	37.3	27.8	43.2	33.9	37.5	43.7	48.4
		Air Temp Avg	73.6	71.6	69.1	60.4	54.5	50.1	42.9	53.9	47.6	48.5	57.8	66.1
E6 2109	Coyote Reservoir	Evap	7.34	8.09	5.09	3.11	1.75	.84	.78	1.44	2.61	2.77	4.23	6.76
		Wind Movement	471	729	505	412	279	101	257	84	172	128	169	383
		Water Temp Avg Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg Min	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Precip.	0	0	T	2.42	.43	2.60	6.22	6.39	3.79	5.48	.45	.01
		Air Temp. Max.	96	100	98	95	85	72	66	74	70	72	90	94
		Air Temp Min.	45	45	41	37	28	23	18	35	30	32	35	40
		Air Temp Avg Max	86.1	87.8	82.1	72.3	66.0	60.0	56.3	65.2	60.8	61.6	69.3	77.7
		Air Temp. Avg. Min.	48.3	50.7	48.1	45.6	40.2	35.9	29.5	44.6	37.1	41.0	46.5	47.6
		Air Temp. Avg	67.2	69.2	65.1	59.0	53.1	48.0	42.9	54.9	49.0	51.3	57.9	62.6
E3 2580	Duttons Landing	Evap	8.71	8.51	5.76	3.71	1.95	1.00	1.48	1.77	3.38	3.33	5.52	8.69
		Wind Movement	3810	3916	3037	2846	1470	1151	1521	1379	1910	2071	2984	3834
		Water Temp Avg Max	82.9	84.9	77.2	70.9	63.6	55.9	50.7	65.4	65.7	68.4	77.1	79.9
		Water Temp Avg Min.	52.2	54.8	53.0	51.4	43.8	42.5	34.5	48.1	42.0	43.5	50.7	53.3
		Precip.	0	.07	.06	7.95	.78	2.61	4.12	3.36	5.07	4.46	.19	T
		Air Temp Max	83	94	92	87	79	64	61	72	70	70	88	84
		Air Temp Min.	48	51	47	43	36	26	24	40	33	34	39	47
		Air Temp. Avg Max.	74.5	78.3	74.3	71.9	67.5	59.9	53.8	65.0	63.3	62.4	69.4	74.2
		Air Temp. Avg Min.	52.5	55.6	51.7	50.8	42.8	42.1	33.2	47.2	41.1	42.2	49.0	51.0
		Air Temp. Avg.	63.5	67.0	63.0	61.4	55.2	51.0	43.5	56.1	52.2	52.3	59.2	62.6

TABLE A-4

MONTHLY EVAPORATION

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
01 4022-10	Hollister Costa	Evap	9.04	8.14	5.12	3.57	3.15	2.26	1.73	2.47	3.34	3.01	5.14	6.58
		Wind Movement	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp Avg. Min	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Precip	.02	T	T	1.26	.26	2.16	4.42	3.23	2.57	3.82	.29	.13
		Air Temp Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp Min	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp. Avg. Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp Avg. Min	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp Avg	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
E6 4922	Lexington Reservoir	Evap	8.81	8.32	6.10	3.01	1.76	.87	1.15	1.62	2.58	3.23	4.79	7.82
		Wind Movement	878	885	836	1252	800	779	943	NR	825	1127	697	924
		Water Temp. Avg Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp Avg Min	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Precip	0	.02	.01	14.69	.48	4.19	9.71	10.02	7.00	8.00	.80	0
		Air Temp Max	95	98	91	91	80	65	65	73	72	78	88	89
		Air Temp Min	43	45	42	37	32	26	22	35	31	32	38	41
		Air Temp. Avg. Max.	85.1	85.9	81.5	70.5	64.9	58.1	54.7	64.7	61.2	61.7	69.4	78.5
		Air Temp. Avg Min	48.5	50.0	47.9	45.4	43.5	39.6	33.8	45.9	38.5	41.4	47.8	48.0
		Air Temp Avg.	66.8	68.0	64.7	60.0	54.2	48.8	44.2	55.3	49.8	51.6	58.6	63.2
E5 4996	Livermore Sewage Plant	Evap	12.72	9.77	7.22	4.03	2.16	1.11	1.24	2.25	2.95	3.21	4.72	9.93
		Wind Movement	3230	3160	2720	2680	1340	1300	1560	1340	1480	1230	1030	2660
		Water Temp. Avg Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Precip.	0	0	0	5.33	.30	1.93	2.03	5.60	3.10	3.35	.47	.01
		Air Temp Max	99	100	97	98	78	67	65	74	72	72	88	97
		Air Temp Min.	44	45	41	38	30	20	19	33	29	24	35	43
		Air Temp Avg. Max	85.5	85.6	82.2	72.7	67.0	58.3	54.4	66.6	62.8	62.3	71.0	80.7
		Air Temp Avg Min.	49.4	50.7	47.9	46.5	38.8	35.8	28.3	44.1	37.1	39.1	45.8	46.9
		Air Temp Avg	67.4	68.2	65.0	59.6	52.9	47.0	41.4	55.4	50.0	50.7	58.4	63.8
E5 6144	Newark	Evap	8.38	8.30	6.12	4.34	1.79	8.50	1.24	1.88	3.49	4.11	5.59	8.67
		Wind Movement	1934	1562	1709	1671	748	507	865	780	1581	1651	1682	2238
		Water Temp. Avg. Max.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Precip.	0	0	0	4.53	.34	2.20	1.51	2.88	3.09	4.19	.57	.08
		Air Temp. Max.	82	95	89	86	83	69	63	74	69	69	84	85
		Air Temp Min.	49	52	48	44	33	28	24	40	37	37	43	46
		Air Temp. Avg. Max	74.5	77.9	73.6	70.9	66.2	56.7	53.6	64.4	62.0	61.4	67.3	73.1
		Air Temp. Avg. Min.	52.3	54.8	53.8	52.6	46.1	41.8	35.1	49.0	42.6	46.5	51.6	52.3
		Air Temp Avg.	63.4	66.4	63.7	61.8	56.2	49.3	44.4	56.7	52.3	54.0	59.5	62.7
D2 7845-10	San Lucas Guidici	Evap	9.01	8.32	5.82	4.56	3.48	2.67	3.18	3.67	3.78	4.33	6.78	7.27
		Wind Movement	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Precip.	0	0	.03	.21	T	2.24	3.34	3.41	2.86	1.75	.32	.06
		Air Temp Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp Avg Max.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp Avg. Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp. Avg.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

TABLE A-4

MONTHLY EVAPORATION

NUMBER	STATION NAME		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
D2 7959-10	Santa Rita Muther	Evop	4.13	5.05	3.21	3.39	2.12	1.82	2.02	2.68	3.04	3.82	4.52	5.89
		Wind Movement	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Precip.	T	.01	.07	.97	.47	2.73	2.71	3.96	3.51	3.92	.16	T
		Air Temp. Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp. Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp. Avg Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp Avg Min	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp. Avg	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
P9 7964	Santa Rose Sewage Plant	Evop	8.16	7.94	6.03	3.41	1.93	1.88	1.18	1.57	3.16	3.32	4.53	6.10
		Wind Movement	2836	2898	2076	2319	1014	723	1533	1655	2488	2890	2639	2749
		Water Temp. Avg. Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg Min	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Precip	0	.09	.24	7.81	.83	4.40	4.87	2.08	4.94	5.42	.56	0
		Air Temp Max.	86	95	91	85	76	61	60	68	63	71	80	83
		Air Temp. Min.	42	39	40	36	29	21	20	33	28	31	34	43
		Air Temp. Avg. Max.	73.4	78.0	73.3	67.2	62.3	53.3	50.4	60.8	55.8	55.6	61.5	72.3
		Air Temp. Avg. Min.	47.6	49.6	46.2	47.0	40.5	36.5	31.5	44.0	36.3	39.4	44.7	47.6
		Air Temp Avg.	60.5	63.8	59.8	57.1	51.4	44.9	41.0	52.4	46.0	47.5	53.1	60.0
P9 7965-03	Santa Rosa Fedrenzini	Evop	7.08	7.03	4.88	2.73	1.77	.78	1.06	1.65	2.77	2.97	4.86	5.50
		Wind Movement	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Max.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Precip.	0	.02	.15	8.19	.63	3.45	5.11	2.89	5.03	4.95	.46	T
		Air Temp Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp Avg. Max.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp Avg Min.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Air Temp Avg	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
D2 8338-01	Soledad C.T.F.	Evop	7.95	7.79	5.56	5.16	3.24	2.67	2.65	2.85	4.17	4.79	6.40	7.75
		Wind Movement	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	4218	4578
		Water Temp. Avg. Max.	NR	NR	NR	52.9	64.7	58.1	54.0	66.1	65.2	67.8	72.8	77.5
		Water Temp. Avg. Min.	NR	NR	NR	NR	43.7	40.7	35.7	46.5	40.0	43.4	47.1	47.4
		Precip.	0	0	0	.25	.04	1.78	2.46	2.12	2.65	1.73	.14	.23
		Air Temp. Max.	80	95	81	89	89	80	70	76	74	73	79	82
		Air Temp. Min	42	43	42	39	30	27	20	36	29	32	38	40
		Air Temp. Avg. Max	72.7	77.5	71.9	74.7	69.5	64.5	59.1	66.9	63.6	63.6	68.1	71.8
		Air Temp. Avg. Min.	50.3	51.0	49.0	45.5	41.8	39.1	33.2	48.2	38.3	42.0	47.5	49.2
		Air Temp. Avg	61.5	64.2	60.4	60.1	55.6	51.8	46.2	57.6	50.0	52.8	57.8	60.5
E3 9R61	Yountville Gamble	Evop	8.33	7.75	5.53	3.35	2.72	.97	1.32	1.41	2.72	2.87	4.92	7.43
		Wind Movement	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	1682
		Water Temp. Avg. Max	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Water Temp. Avg. Min	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
		Precip.	0	02	.02	11.36	.63	3.96	8.92	2.62	5.66	4.64	.52	T
		Air Temp. Max.	NR	NR	NR	NR	NR	NR	NR	NR	69	73	84	91
		Air Temp Min.	NR	NR	NR	NR	NR	NR	NR	NR	28	30	38	42
		Air Temp. Avg. Max.	NR	NR	NR	NR	NR	NR	NR	NR	60.9	61.2	69.5	78.0
		Air Temp. Avg. Min.	NR	NR	NR	NR	NR	NR	NR	NR	35.8	39.7	46.8	47.9
		Air Temp. Avg.	NR	NR	NR	NR	NR	NR	NR	NR	48.4	50.4	58.2	63.0

APPENDIX B

SURFACE WATER FLOW

SURFACE WATER FLOW

This appendix presents surface water measurement data collected and assembled by the Department of Water Resources. It contains information collected in the Central Coastal Area during the 1963 water year covering the period from October 1, 1962 through September 30, 1963.

Maximum and Minimum Tides

There are usually two high and two low waters in a day. Tides follow the moon more closely than they do the sun, and the lunar or tidal day is about 50 minutes longer than the solar day. This causes the tide to occur later each day, and a tide which has occurred near the end of one calendar day will be followed by a corresponding tide that may skip the next day and occur in the early morning of the third day. Also, the two high and two low tides are usually unequal. They are commonly designated as higher high, lower high, higher low, and lower low tides.

Table B-1 on pages B-6 and B-7 lists maximum and minimum tides at the Sacramento River at Collinsville and Suisun Bay at Benicia Arsenal, respectively. These data are obtained from graphical charts plotted by continuous water stage recorders. The values are in feet above -13.05 feet USC&GS mean sea level datum of 1929 at Collinsville and above -10.00 feet at Benicia Arsenal. The values in most cases represent higher high water and lower low water. During a calendar day in which three instead of four tides occurred the high value represents lower high water in the case where higher high tide did not occur and the low value represents higher low water in the case where lower low tide did not occur. The maximum and minimum values at the bottom of each monthly column represent the extremes observed during that month.

At the bottom of each table the maximum gage height of record shown is measured from the same datum as the daily high and low values.

Daily Mean Discharge

Table B-2 on pages B-8 and B-9 presents daily mean discharges in Arroyo de los Coches near Milpitas and in Butano Creek near Pescadero. Each of these stream gaging stations is equipped with a continuous water stage recorder. Each has a stage discharge relationship or rating developed. The rating gives the flow or discharge in cubic feet per second (cfs) for each water stage or gage height at a station.

The rating is developed by making streamflow measurements with a current meter at various water stages ranging from near minimum to near maximum. Normally, the rating is fairly permanent where there is a fixed channel and a fixed flow regimen at the station. The rating varies, however, where the bed of the channel is of loose shifting sand and gravel or where vegetative growth builds up in the channel changing the flow regime. Where the rating is not permanent and varies periodically, more frequent measurements of discharge are necessary to accurately determine the discharge.

The mean, maximum, and minimum values at the bottom of each monthly column are representative of that month and year only. The acre-feet value for each month is a total of the daily values which are converted to acre-feet for the computation. The mean discharge under "Water Year Summary" is an average of the monthly means. The maximum and minimum discharges are absolute instantaneous extremes that occurred during the year. The total acre-feet is the sum of the monthly acre-feet values.

The streamflow data reported herein are derived through the use of mechanical, arithmetical, and empirical operations and methods. The results are affected by inherent inaccuracies in procedures and equipment. It is, therefore, necessary to establish limits of accuracy for the reported data. The following is a listing of significant figures used in reporting streamflow data:

1. Daily flows - cubic feet per second

   0.0 - 9.9 Tenths

   10 - 99 2 significant figures

   100 - up 3 significant figures

2. Means - cubic feet per second

   0.0 - 99.9 Tenths

   100 - 999 3 significant figures

   1000 - above 4 significant figures

Water year totals are reported to a maximum of four significant figures.

TABLE B-1

DAILY MAXIMUM AND MINIMUM TIDES

SACRAMENTO RIVER AT COLLINSVILLE

STATION NO.	WATER YEAR
891110	1965

DATE	OCT.	NOV	DEC.	JAN.	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DATE
1	19:32	19:51	19:59	13:42	13:07	19:03	19:16	13:25E	19:50E	19:23	13:29		1
2	19:29	19:54	19:23	19:24	13:14	19:18	19:16	13:28	19:37E	14:27	19:36		2
3	19:39	19:58	19:42	19:21	13:23	19:19	19:26	19:24	13:05E	16:42	19:37		3
4	19:53	13:01	19:27	19:22	14:19	19:17	19:37	19:21	16:41	16:44	19:19	17.6E	4
5	19:13	19:38	19:43	19:37	19:22	19:16	19:33	19:22	16:41	16:01	19:34		5
6	19:32	19:16	19:06	19:19	13:23	19:16	19:31	19:36	19:00E		19:21		6
7	19:03	19:21	19:33	19:28	13:39	19:16	19:27	19:42	17:08		19:29		7
8	19:39	19:08	19:39	19:02	13:37	19:36	19:36	19:42	17:10		19:36		8
9	19:28	19:43	19:24	17:19	13:52	19:20	19:38	19:24	17:10		19:18		9
10	19:10	19:31	19:03	17:02	13:23	19:39	19:35	19:38	17:36		19:28		10
11	19:37	19:38	19:15	19:34	19:17	19:28	19:28	19:19	19:30		19:33		11
12	13:13	19:17	17:01	19:44	19:36	19:05	19:29	16:24	16:72		19:19		12
13	13:28	19:36	19:14	19:36	19:17	19:29	19:15	16:21	16:30	19:38	19:17		13
14	13:25	19:38	19:37	19:24	19:24	19:19	19:33	16:08	19:28	19:24	19:25		14
15	17:46	19:49	19:18	19:33	19:33	19:27	19:36	15:59	19:35	19:35	19:29		15
16	14:29	19:21	19:48	19:30	19:27	19:20	19:34	15:50E	19:33	19:29	13:33		16
17	13:16	19:33	19:38	19:32	19:44	19:13	19:38	19:11E	19:37	19:32	13:36		17
18	13:38	19:25	19:38	19:33	19:26	19:27	19:34	19:34E	19:43	19:37	19:34		18
19	19:19	19:19	19:30	13:34	19:35	19:39E	19:32	19:32E	19:26	19:29	19:33		19
20	19:42	19:36	19:09	19:31	19:37	19:34E	19:14	19:22	17:23	19:34	19:34		20
21	13:21	19:09	19:31	19:18	19:37	19:29	19:23	17:31	17:19	19:32	19:36		21
22	13:28	13:21	19:27	19:33	19:43	19:11	19:18	19:34	19:27	19:12			22
23	19:37	19:33	19:28	19:34	19:47	19:28	13:28	19:20	17:20	19:17			23
24	19:37	19:09	19:32	19:08	19:31	19:19	13:36	17:41	19:06	19:17			24
25	19:31	19:04	19:06	19:31	19:19	19:41	13:06	17:32	19:37	13:33			25
26	19:01	19:22	19:14	19:32	19:37	19:18		17:23	19:18	13:23			26
27	13:20	19:08	19:19	19:06	19:28	19:18		16:39	19:13	19:39		19:34	27
28	19:05	19:32	19:24	19:16	19:18	19:39		19:12	19:19	19:21		19:31	28
29	19:15	19:22	19:08	13:32		19:21		19:16	19:25	19:19		13:32	29
30	19:19	19:16	19:37	19:28		19:28		19:32	19:39	19:23	17.6E	19:34	30
31	19:39		19:32	13:38.		19:31		19:41		19:26			31
	17:46	19:37	17:37	17:28	19:29	19:29E	17:38	17:31	17:19	17:31	17.6E	7.8E	

E - Estimated
NR- No Record

In order to machine process the data in this table, it was necessary to avoid negative gage heights.
Subtract 10.00 feet to obtain recorder gage height.

LOCATION			MAXIMUM			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC T B R M D B&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			C.F.S	GAGE HT	DATE			FROM	TO		
38°04'25"	121°51'18"	SW27 3N 1E		9.2	4/6/58		June 29-Date	1929 1929		0.00 -3.05	USED USCGS

Station located 0.4 mi. SW of Collinsville, 3.3 mi. NE of Pittsburg.
Maximum gage height does not indicate maximum discharge.

TABLE B-1

DAILY MAXIMUM AND MINIMUM TIDES

SUISUN BAY AT BENICIA ARSENAL

in feet

STATION NO	WATER YEAR
E03360	1963

DATE	OCT.	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DATE
1	12.84 4.35	12.91 4.32	12.87 4.98	13.51 4.32	14.20 5.13	13.99 5.37	12.87 5.09	13.39 5.59	12.99 5.96	13.20 6.35	13.56 6.01	13.49 5.65	1
2	13.04 5.39	12.80 5.50	12.70 5.39	12.71 5.91	13.87 5.16	13.11 5.39	12.41 5.94	12.70 5.97	12.99 5.44	13.32 5.99	13.63 5.85	13.57 5.56	2
3	12.96 5.28	12.57 5.52	12.22 5.16	13.08 5.79	14.39 5.09	12.90 5.00	12.24 5.70	12.17 5.15	13.01 5.82	13.45 5.68	13.70 5.57	12.66 5.61	3
4	12.87 5.10	12.38 5.53	12.36 5.52	13.27 5.00	14.59 5.09	12.66 5.60	12.28 5.10	12.90 5.47	13.23 5.80	13.55 5.41	12.25 5.38	13.67 5.97	4
5	12.75 5.29	12.25 5.52	12.45 5.29	13.46 5.65	14.41 5.56	12.47 5.47	12.71 5.51	13.08 5.23	13.49 5.49	12.07 5.31	13.64 5.36	13.51 5.08	5
6	12.72 5.01	12.39 5.36	12.88 5.70	13.62 5.39	14.38 5.40	13.02 5.78	12.94 5.77	12.93 5.80	12.43 5.50	13.70 5.22	13.66 5.38	13.25 5.15	6
7	12.54 5.78	12.57 5.37	13.13 5.81	NR NR	14.50 5.50	13.16 5.91	13.13 5.11	13.10 5.80	13.76 5.50	13.77 5.15	13.52 5.51	13.39 5.45	7
8	12.67 5.58	12.98 5.66	13.47 5.57	NR NR	14.40 5.60	13.16 5.21	13.11 5.21	13.24 5.55	13.84 5.24	13.70 5.03	13.24 5.68	13.53 5.30	8
9	12.88 5.54	13.49 6.17	13.73 7.21E	NR NR	14.51 5.53	13.08 5.40	13.20 5.90	13.19 5.18	13.77 5.32	13.50 5.13	12.97 5.85	13.56 5.44	9
10	12.95 5.79	13.62 5.60	13.89E 7.10E	NR NR	14.30 5.28	12.87 5.45	13.27 5.99	13.01 5.13	14.05 5.57	13.29 5.25	13.20 5.19	13.44 5.06	10
11	13.80 5.96	13.72 5.33	14.00 7.19E	NR NR	13.51 5.22	12.60 5.64	13.23 5.90	13.10 5.02	13.62 5.47	13.21 5.56	13.39 5.71	13.45 5.94	11
12	14.09 5.22	13.99 5.31	13.63E 7.17E	NR NR	13.14 5.67	12.30 5.70	13.33 5.15	12.89 5.95	13.36 5.63	13.09 5.83	13.42 5.48	13.38 5.80	12
13	14.25 5.06	13.91 5.34	13.68 5.02	NR NR	12.92 5.25	12.30 5.91	13.28 5.10	12.81 5.20	12.97 5.65	13.29 5.19	13.52 5.03	13.46 5.67	13
14	14.14 5.90	13.79 5.19	13.50 7.31E	NR NR	12.79 5.55	12.50 5.26	13.44 5.98	12.66 5.58	12.99 5.72	13.62 5.59	13.65 5.64	13.60 5.75	14
15	14.07 5.77	13.29 5.22	12.95E 5.48E	NR NR	12.61 5.36	12.70 5.99	12.91 5.10	12.33 5.57	13.31 5.03	13.84 5.86	13.65 5.41	13.62 5.87	15
16	14.06 5.55	12.71 5.08	12.44E 5.61E	NR NR	12.71 5.21	13.05 5.45	12.53 5.40	12.38 5.50	13.71 5.47	13.91 5.15	14.01 5.51	13.48 6.00	16
17	14.07 5.66	12.21 5.96	12.11E 5.93	NR NR	12.70 5.69	12.75 5.04	12.59 5.29	12.80 5.78	14.02 5.37	13.98 5.56	12.60 5.98	13.00 6.19	17
18	13.89 10.57	12.10 5.22	13.02 5.35	NR NR	12.71 5.01	12.09 5.49	13.07 5.90	13.21 5.77	12.45 5.96	14.13 5.29	13.86 5.46	13.55 5.43	18
19	13.40 5.94	13.07 5.34	12.69 6.59	12.50 5.92	12.89 5.52	12.05 5.92	13.15 5.71	13.47 5.24	14.20 5.61	12.37 5.12	13.66 5.49	13.09 6.31	19
20	12.77 5.86	12.28 5.55	12.71 6.71	12.58 5.48	13.14 5.09	12.22 6.99	13.27 5.87	13.96 6.06	14.42 5.31	14.12 5.02	13.39 5.52	NR NR	20
21	12.54 5.99	12.55 5.98	12.76 8.15	12.99 5.44	13.28 5.56	12.88 7.17	13.51 5.76	12.71 5.59	14.51 6.91	14.01 5.01	13.19 5.84	NR NR	21
22	12.58 5.97	12.86 8.43	13.00 5.88	13.14 5.25	13.45 6.93	13.39 5.58	13.56 5.71	14.10 6.99	14.31 6.75	13.91 5.16	13.04 6.58	NR NR	22
23	12.74 8.10	13.09 8.36	13.32E 5.77	13.30 5.05	13.54 6.82	13.34 5.18	13.75 5.30	14.34 6.80	14.09 6.71	13.63 5.48	12.83 8.49	NR NR	23
24	12.78 8.18	12.95 7.73	13.44 7.41	13.55 5.07	13.52 6.73	12.97 6.90	14.10 5.13	14.40 6.89	13.70 6.72	13.16 5.41	12.75 8.69	NR NR	24
25	12.80 8.31	12.98 7.50	13.53 7.12	13.59 6.98	13.34 6.96	12.87 7.23	14.46 7.26	14.22 6.54	13.21 7.01	12.62 7.82	12.70 9.12	NR NR	25
26	12.86 8.15	13.35 7.83	13.62 7.02	13.53 7.02	12.95 7.12	13.05 7.57	14.45 7.05	13.88 6.60	12.90 7.52	12.85 8.12	12.71 8.76	NR NR	26
27	12.74 7.77	13.16 7.13	13.58 8.84	13.33 7.14	13.03 7.84	13.44 7.89	13.89 8.60	13.58 6.89	12.82 7.72	13.13 8.99	12.71 8.61	NR NR	27
28	12.73E 7.86	13.11 6.92	13.43 6.68	13.16 7.28	13.04 7.58	14.08 7.77	13.37 8.89	13.28 7.48	12.83 8.01	13.20 8.99	12.95 8.36	NR NR	28
29	12.97 7.57	12.96 6.78	13.17 8.76	12.88 8.36		13.77 7.47	12.92 7.00	12.75 7.43	12.82 8.87	13.19 9.02	13.27 8.19	NR NR	29
30	13.05 7.57	13.00 7.00	13.01 8.95	13.69 8.20		13.52 7.18	12.50 7.43	12.83 7.96	12.96 8.62	13.28 8.81	13.34 8.07	NR NR	30
31	13.98 7.44		12.63 8.12	14.29 10.60		13.25 7.24		13.00 8.60		13.41 8.21	13.44 7.80		31
MAXIMUM	14.29E 7.44	13.99 6.88	14.00 6.68	14.29 NR	14.59 8.59	14.08 6.47	14.46 6.60	14.40 6.54	14.51 6.71	14.13 7.01	14.01 7.96	13.67 2.58	MAXIMUM
MINIMUM													MINIMUM

E - Estimated
NR- No Record

* In order to machine process the data in this table, it was necessary to avoid negative gage heights. Subtract 10.00 feet to obtain recorder gage height.

LOCATION			MAXIMUM OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.&R M.D.B.&M.	C.F.S	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
38°02'26"	122°08'44"	SW6 2N 2W		6.72	3/5/62		Jun 29-Apr 40 Apr 40-Date	1929 1940 1942	1940 1942	-2.21 -5.00 0.00	USCGS USCGS USCGS

Station located on inshore side of wharf, immediately SE of Benicia.
Maximum gage height listed does not indicate maximum discharge.
Period of record intermittent from 1929-1940.

TABLE B-2

DAILY MEAN DISCHARGE

ARROYO DE LOS COCHES NEAR MILPITAS

IN SECOND FEET

STATION NO	WATER YEAR
E64050	1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.0	0.0	0.0	0.0	0.4*	0.0	0.3	0.1*	0.1	0.0	0.0*	0.0	1
2	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.1	0.0	0.0	0.0	2
3	0.0*	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	3
4	0.0	0.0	0.0	0.0	0.0	0.0	0.1*	0.1	0.1	0.0	0.0	0.0	4
5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	5
6	0.0	0.0	0.0	0.0	0.0*	0.1	1.1	0.1	0.1*	0.0	0.0	0.0	6
7	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.1	0.1	0.0	0.0	0.0	7
8	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	8
9	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	9
10	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.2	0.1	0.0	0.0	0.0	10
11	0.0	0.0	0.0	0.0	0.1	0.1*	0.1	0.1	0.1	0.0	0.0	0.0	11
12	0.0	0.0	0.0	0.0	1.0	0.0	0.1	0.1	0.1	0.0*	0.0	0.0	12
13	0.0	0.0	0.0	0.0	2.4	0.0	0.2	0.1	0.1	0.0	0.0	0.0	13
14	0.0*	0.0	0.0	0.0	0.5	0.1	1.8	0.1	0.1	0.0	0.0	0.0	14
15	0.0	0.0	0.0	0.0	0.2	0.1	1.2	0.1	0.1	0.0	0.0	0.0	15
16	0.0	0.0	0.0	0.0	0.2	0.4	0.3	0.1	0.1	0.0	0.0	0.0	16
17	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.0	0.0	0.0	17
18	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.0	18
19	0.0	0.0	0.0*	0.0	0.0*	0.0	0.9	0.1	0.0	0.0	0.0	0.0	19
20	0.0	0.0	0.0	0.0	0.0	0.0*	1.6	0.1	0.0	0.0	0.0	0.0	20
21	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.1	0.0	0.0	0.0	0.0	21
22	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.0	0.0	0.0*	0.0	22
23	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	23
24	0.0	0.0	0.0	0.0	0.1	0.3	0.2	0.1	0.0	0.0	0.0	0.0	24
25	0.0	0.0*	0.0*	0.0	0.0	0.2	0.3	0.1	0.0	0.0	0.0	0.0	25
26	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	26
27	0.0	0.0	0.0	0.0	0.0	0.8	0.2	0.1	0.0	0.0	0.0	0.0	27
28	0.0	0.0	0.0	0.0	0.0*	1.9	0.2	0.1	0.0	0.0	0.0	0.0	28
29	0.0	0.0	0.0	0.0*		0.8	0.2	0.1	0.0	0.0	0.0	0.0	29
30	0.0	0.0	0.0	0.1*		0.5	0.1	0.1	0.0	0.0*	0.0	0.0*	30
31	0.0*		0.0	1.0		0.4		0.1		0.0	0.0		31
MEAN	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.1	0.1	0.0	0.0	0.0	MEAN
MAX.	0.0	0.0	0.0	1.0	2.4	1.9	1.8	0.2	0.1	0.0	0.0	0.0	MAX.
MIN.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	MIN.
AC.FT.				2	11	13	24	6	3				AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
‡ - E and *

WATER YEAR SUMMARY

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT	MAXIMUM MO	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT	MINIMUM MO	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE-FEET
0.1	14.0	2.67	2	12	2400	0.0		10	1	0000	60

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC T B R M O B&M	C.F.S.	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 [illegible]	121 51' 46"	NW4 [illegible] 1E	16.7E	2.71	2-14-62	9-16-59 Date	Sept. 59 Date	1959		0.00	Local

Station located 200 ft. above Calaveras Road Bridge. 2.6 miles NE of Milpitas. Tributary to Coyote Creek via Penitencia Creek.
Recorder installed Sep. 16, 1959. New control installed 7-27-60 with V-notch for small flows.

TABLE B-2

DAILY MEAN DISCHARGE

BUTANO CREEK NR PESCADERO

STATION NO.	WATER YEAR
283200	1963

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	8.8E	6.2	0.2	0.1	592	25.	44	48	16	6.9	2.7	3.8	1
2	8.8E	9.6	0.4	7.9	107	24	40	27	14	6.4	3.0	3.8	2
3	8.8	9.0	1.9	7.6	107	22	34	24	13	5.9	3.0	2.8	3
4	0.7	9.0	1.1	7.2	96	21	32	24	13	5.3	3.0	2.6	4
5	0.7	4.3	1.4	6.8	73	19	21	32	19	5.1	3.1	2.9	5
6	0.7	0.7	1.7	6.6	47	19	68	21	13	4.9	2.9	2.3	6
7	0.7	9.6	2.1	6.4	42	18	184	29	11	4.9	2.7	3.2	7
8	0.8	3.6	2.6	6.0	37	18	48	29	11	4.9	3.0	3.4	8
9	0.8	3.1	3.1	5.8	126	17	35	27	11	4.1	2.8	3.2	9
10	2.6	2.6	3.7	5.6	209	17	32	26	10	4.0	3.0	3.0	10
11	4.1	2.3	4.3	5.4	118	17	27	26	9.6	3.8	3.4	3.2	11
12	19	2.3	5.4	5.4	105	17	26	25	9.1	3.6	3.6	3.7	12
13	609	2.1	7.7	5.4	222	17	24	22	9.3	3.1	3.7	3.6	13
14	261	1.8	8.9	5.4	136	17	98	20	10	3.6	3.3	3.4	14
15	65	1.6	99	5.4	103	17	107	19	11	4.5	3.2	3.9	15
16	33	1.4	89	5.4	87	33	81	18	11	4.6	3.1	2.8	16
17	23	1.6	134	5.4	73	22	66	18	11	4.0	3.4	3.2	17
18	19	1.4	98	5.4	64	18	57	17	10	3.9	3.9	3.4	18
19	16	1.2	53	5.2	56	17	98	17	9.7	3.9	3.3	2.8	19
20	14	1.1	41	5.0	48	17	84	17	9.3	3.7	3.2	3.0	20
21	13	1.1	36	5.8	42	16	78	16	9.1	3.6	3.6	3.1	21
22	11	0.9	33	4.9	39	19	68	15	8.6	3.2	3.4	3.4	22
23	11	0.7	32	4.5	36	25	61	15	7.7	3.1	3.6	3.3	23
24	9.7	0.5	31	4.3	33	19	55	15	7.1	2.8	3.7	3.2	24
25	9.0	0.5	31	4.3	31	18	55	15	8.0E	2.8E	4.1	3.3	25
26	8.9	0.5	31	4.3	29	18	52	15	7.9	2.8E	4.1	2.9	26
27	8.1	1.79	29	4.3	27	49	47	15	6.2	2.8	3.8	2.6	27
28	7.6	0.3	28	4.2	26	189	44	15	5.7	2.9	2.8	2.8	28
29	7.2	0.2	15	4.8		81	36	15	5.7	2.8	3.2	2.9	29
30	6.8	0.2	11	273		59	34	15	5.6	2.9	3.0	2.2	30
31	6.6		8.3	884		52		15		2.7	2.8		31
MEAN	46.6E	2.2	23.9	44.3	97.9	29.9	56.6	22.1	9.7	3.9	3.2	3.1	MEAN
MAX.	609	9.6	154	884	592	189	187	48.0	14.9	6.9	4.1	3.7	MAX.
MIN.	3	0.2	0.2	4.2	26.9	16.9	21.8	15.0	2.6	2.6	2.7	2.6	MIN.
AC/FT	3419	130	1529	2725	5817	1837	3366	1327	578	242	199	182	AC/FT

E - Estimated
NR - No Record
◆ - Discharge measurement or observation of no flow made on this day.
Σ - E and ◆

WATER YEAR SUMMARY

MEAN	MAXIMUM				MINIMUM				TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO.	DAY	TIME	ACRE-FEET
28.2Σ	1340	16.21	1	31	1350	0.0	3.12	8	30	0740	20000

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37° 13' 49"	122° 21' 51"	SW14 8S 4W	1340	16.21	1/31/63	June 62-Date	June 62-Date	1962		0.00	Local

Station located 1.7 mi. SW intersection Pescadero Road and Old Stage Road in Pescadero.
Tributary to Pescadero Creek. Recorder installed June 22, 1962.

APPENDIX C

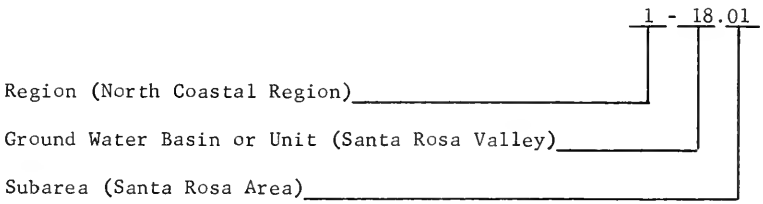
GROUND WATER MEASUREMENT

GROUND WATER MEASUREMENT

This appendix includes two tables. Table C-1 "Description of Selected Wells", provides a description of 213 wells for which ground water level data are presented in Table C-2, "Ground Water Levels at Wells". A description of the items in the tables follows.

DESCRIPTION OF SELECTED WELLS

Table C-1, "Description of Selected Wells", is arranged in region, basin, and well number order. The water pollution control board regions used in this report and shown on Plate 2, "Ground Water Basins or Units in the Central Coastal Area", are geographic areas defined in Section 13040 of the Water Code. The regions, ground water basins, or units and subareas are listed by a numbering system as follows:



State Well Number

The state well numbering system used in this report is based on the township, range, and section subdivision of the Public Land Survey. It is the system used in all ground water investigations made by the Department of Water Resources. In this report, the number of a well, assigned in accordance with this system, is referred to as the State Well Number. Under the system each section is divided into 40-acre tracts lettered as follows:

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Wells are numbered within each 40-acre tract according to the chronological sequence in which they have been assigned State Well Numbers. For example, a well which has the number 16N/12W-17K,M would be in Township 16 North, Range 12 West, Section 17, Mount Diablo Base and Meridian and would be further designated as the first well assigned a State Well Number in Tract K.

Agency Well Number

The agency well number is the number assigned to a well by any agency other than the Department of Water Resources in accordance with the numbering system used by that agency. Agencies that use the state well numbering system normally coordinate assignment of well numbers with the Department. These numbers, when common, are not shown in the "Agency Well Number" column; when different, the last five digits are shown in the "Agency Well Number" column.

Agency Supplying Data

Each number in this column is the code number for a cooperating agency. The agency code consists of a five digit number, the first of which

is a region number. Thus, 32100 refers to Agency 2100 in Region 3. Because of the limitations of punch-card space, the agency code has been shown as a four digit number without the region number. Therefore, the four digit agency code should always be referred to the region in which the well is located.

The first digit of the four digit agency code, as listed below, designates the type of well numbering system used by the agency.

Code	Well Numbering System
1	Location numbers
2	Monterey County Flood Control and Water Conservation District or Santa Clara Valley Water Conservation District
3	Serial numbers
4	Local numbers
5	State or U. S. Geological Survey
6	U. S. Bureau of Reclamation
7	South San Joaquin Irrigation District

The last three digits of the agency code, as listed below, are numbers that designate, within specified limits, the type of agency from which the data were obtained.

Code	Type of Agency
000-049	Federal
050-099	State
100-199	County
200-399	Municipal
400-699	District - Water, Irrigation, Conservation, etc.
700-999	Private

The agencies and code numbers assigned to them in each of the regions are listed in the following tabulation:

Agency Code	Agency
	North Coastal Region
5000	U. S. Geological Survey
5050	Department of Water Resources
	San Francisco Bay Region
2400	Santa Clara Valley Water Conservation District
5000	U. S. Geological Survey
5050	Department of Water Resources
5100	Alameda County Flood Control and Water Conservation District
5101	Napa County
5109	Solano County
5401	Alameda County Water District
	Central Coastal Region
2100 and 5100 1/	Monterey County Flood Control and Water Conservation District
2400	Santa Clara Valley Water Conservation District
5050	Department of Water Resources
5101	San Benito County
5102	Santa Cruz County
5400	South Santa Clara Valley Water Conservation District

1/ In the Paso Robles subbasin of Salinas Valley (3-4.06), this agency number refers to the San Luis Obispo County Flood Control and Water Conservation District.

Well Use

The well use is indicated as follows:

Code	Well Use
1	Domestic
2	Irrigation
3	Municipal
4	Industrial
5	Injection
6	Drainage
7	Domestic and Irrigation
8	Test
9	Stock
0	Unused

Well Depth in Feet

Well depths shown were reported by the owner, obtained from a driller's log, or measured at the time of the well canvass.

Data Available

Under this heading, code numbers, as listed below, indicate the type of data that are available with respect to well logs, water analyses, and production records.

Data	Code
Log record	
Log	1
Confidential log (Sec. 7076, Water Code)	2
Water Analyses	
Mineral	

Data	Code
Water Analyses	
Sanitary	2
Heavy Metals	3
Mineral and Sanitary	4
Production record	
Available	1
Pump test available	2

Record Begins and Record Ends

The last two digits of the year the record began or ended are shown.

GROUND WATER LEVELS AT WELLS

Table C-2, "Ground Water Levels at Wells", is arranged in region, basin, well number, and date order. It includes measurements of depths to water in wells made from July 1, 1962 through June 30, 1963. Table headings discussed below are only those that were not discussed under "Description of Selected Wells".

Ground Surface Elevation in Feet

The numbers in this column give the elevation in feet above mean sea level (USC&GS datum) of the ground surface from which depth to water is measured. Elevations of ground surface are usually taken from topographic maps and the accuracy is controlled by topographic standards.

Date

The date shown in the column is the date on which the depth measurement, shown in the next column, was made.

Ground Surface to Water Surface in Feet

This is the measured depth in feet from the ground surface to the water surface in the well. Certain of the depth measurements in the column may be followed with an asterisk which indicates a questionable measurement. Depth to ground water measurements may be questionable for such reasons as (a) well being pumped while undergoing measurement, (b) nearby pump operating, (c) casing leaking or wet, (d) well pumped recently, (e) air gauge measurement, or, (f) recharge operation at well or nearby. The specific reason for any asterisk on any given measurement may be obtained from the Department of Water Resources.

Other symbols used are:

Measurement discontinued	#
Well destroyed	@
No measurement for other reasons	□

Water Surface Elevation in Feet

This is the elevation in feet above mean sea level (USC&GS datum) of the water surface in the well. It was derived by subtraction of the depth measurement from the ground surface elevation.

The words FLOW and DRY are shown in this column to indicate a flowing or a dry well.

Agency Supplying Data

Each number in this column is the code number for the agency from which the water level data were obtained.

TABLE C-1

DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE: LOG	DATA AVAILABLE: WATER ANAL.	DATA AVAILABLE: PROD. REC.	RECORD BEGINS	RECORD ENDS
	NORTH COASTAL REGION								
POTTER VALLEY				1-14.00					
17N/11W-18J01 M		5000	1	35					51
17N/11W-32J01 M		5000	1	12					51
UKIAH VALLEY				1-15.00					
15N/12W-08L01 M		5000	1	62					51
15N/12W-21M01 M		5000	7	46					51
15N/12W-35M01 M		5000	2	190					51
HOPLAND VALLEY				1-16.00					
13N/11W-18E01 M		5000	7	52					53
13N/11W-19P01 M		5000	2	44					53
13N/11W-20G01 M		5000	1	135					53
ALEXANDER VALLEY				1-17.00					
10N/09W-18B01 M		5000	2	180					50
10N/09W-26L02 M		5000	1	40					50
10N/09W-33C01 M	33B01	5000	1	20					50
11N/10W-08P01 M		5000	1	30					51
11N/10W-17P02 M		5000	2	36					53
11N/10W-19F02 M		5000	1	334					52
SANTA ROSA VALLEY				1-18.00					
SANTA ROSA AREA				1-18.01					
6N/08W-07P02 M		5000	7	120					45
6N/08W-13R01 M		5000	1	250					42
7N/07W-06R01 M		5050	7	133					51
SANTA ROSA AREA				1-18.01					
7N/09W-35D02 M		5050	1	167					50
8N/09W-36N01 M		5000	0	89					49
HEALDSBURG AREA				1-18.02					
8N/09W-03P01 M		5000	1	110					50
8N/09W-22L01 M		5000	1	44					51
9N/09W-28N01 M		5000	2	53					53
10N/10W-35Q01 M		5000	0	285					54
LOWER RUSSIAN RIVER VALLEY				1-98.00					
7N/10W-06N01 M	7D01	5000	3	120					58
7N/11W-14E01 M		5000	1	47					51

DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE: LOG	DATA AVAILABLE: WATER ANAL.	DATA AVAILABLE: PROD REC.	RECORD BEGINS	RECORD ENDS
SAN FRANCISCO BAY REGION									
PETALUMA VALLEY				2-01.00					
3N/06W-01Q01 M		5050	1	225					50
5N/07W-20B02 M		5000	9	158					53
5N/07W-21H01 M		5000	1	92					59
5N/07W-26R01 M		5000	0	428					50
5N/07W-35K01 M		5050	2	78					49
NAPA-SONOMA VALLEY				2-02.00					
NAPA VALLEY				2-02.01					
4N/04W-13E01 M		5000	9	98					30
5N/04W-11M01 M		5000	1	59	1				50
6N/04W-17A01 M		5000	0	250	1				49
7N/05W-09Q01 M		5101	2	333	1				49
7N/05W-09Q02 M	16b02	5000	0	232					49
7N/05W-09Q03 M		5101	1	25					49
7N/05W-23D02 M		5101	2	129					49
8N/06W-10Q01 M		5000	9	184	1				49
SONOMA VALLEY				2-02.02					
5N/05W-17C01 M		5000	1	70					50
5N/05W-28N01 M		5050	2	130	1				46
5N/05W-29N01 M		5000	2	100					51
SUISUN-FAIRFIELD VALLEY				2-03.00					
4N/02W-06A01 M		5109	0	39					20
4N/02W-09A01 M		5109	0	37					48
4N/03W-01D01 M		5109	1	67					18
SUISUN-FAIRFIELD VALLEY				2-03.00					
5N/01E-36A01 M		5109	9	38					29
5N/01W-07E01 M		5109	9	33					48
5N/01W-28P01 M		5109	1	40					49
5N/02W-17D02 M		5109	2	70					48
5N/02W-27J02 M		5000	0	60					49
5N/02W-29R01 M		5109	2	120					49
5N/02W-30J01 M		5000	2	220					49
5N/03W-26F02 M		5109	1	282					18
YGNACIO VALLEY				2-06.00					
1N/01W-07K01 M		5050	1						58
1N/02W-11N01 M		5050	1	81	2				58
2N/02W-27R01 M		5050	1	131					58
2N/02W-36E01 M		5050	1	40					58
SANTA CLARA VALLEY				2-09.00					
SOUTH ALAMEDA COUNTY UPR AQUIFER				2-09.01					
3S/02W-08R05 M		5100	1	85					50
3S/03W-24Q02 M		5100	9	80					49
4S/01W-18G01 M		5401	4	160					58
4S/01W-22P05 M		5100	2	180					48
4S/01W-29C04 M		5401	0	145					50
4S/02W-13C02 M		5401	2	180					49
4S/02W-24Q02 M		5100	2						49
5S/01W-04F01 M		5401	0	97					57
5S/01W-09Q01 M		5100	9	60					50

TABLE C-1

DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE: LOG	DATA AVAILABLE: WATER ANAL.	DATA AVAILABLE: PROD REC.	RECORD BEGINS	RECORD ENDS
SOUTH ALAMEDA COUNTY LWR AQUIFER				2-09.01					
2S/03W-36R01 M		5100	2	601				59	
3S/02W-07D01 M		5100	0					49	62
3S/02W-19A02 M		5050	0	218				50	
3S/03W-24J01 M		5100	7	511				49	
4S/02W-02Q01 M		5100	2	475				50	
4S/02W-35R02 M		5401	7	224	2			58	
4S/02W-36K01 M		5401	0	241				49	
5S/01W-09M01 M		5100	2	297	1			49	
NORTH SANTA CLARA COUNTY				2-09.02					
6S/01E-07E01 M	5C 059	2400	0	525				36	
6S/01E-21R01 M	8D 342A	2400	2	560	2			51	
6S/01E-23P02 M	8C 127	2400	0	295				36	
6S/01E-30M01 M	7E 084	2400	7	250				30	
6S/01W-10P02 M		5000	8	410				58	
6S/01W-23E01 M		5000	2	425				58	
6S/02W-16R01 M	2G 005	2400	2					36	
6S/02W-25C01 M	4F 030	2400	1	500				30	
6S/02W-35C01 M	3G 020	2400	2	480				30	
7S/01E-01K01 M	9D 180A	2400	7	400				36	
7S/01E-08L01 M	8F 274	2400		235				36	
7S/01E-09D02 M	8E 120	2400	3					36	
7S/01E-16C05 M		5000	3	908				58	
7S/01E-31A02 M	9G 148	2400	2					36	
7S/01E-31R01 M	9G 147A	2400		400				50	
NORTH SANTA CLARA COUNTY				2-09.02					
7S/02E-07P01 M	10D 403	2400	3	525				57	
7S/02E-17H01 M	11D 304	2400		400				31	
7S/02E-33C01 M	12E 398	2400		61				55	
7S/01W-35C01 M	8H 117	2400	3	438				36	
7S/02W-03Q01 M	4H 023A	2400	2	800				36	
7S/02W-04B01 M	3H 013	2400	2	450				36	
7S/02W-22A01 M	4I 037	2400	2	620				36	
8S/01E-07H02 M	9H 166A	2400		350				54	
8S/01E-13H01 M	12G 257	2400	7	110				36	
8S/02E-20F03 M	13G 297	2400						40	
8S/02E-22D01 M	13F 233	2400	7					36	
8S/01W-15B01 M	8I 129	2400		64				36	
9S/02E-01J01 M	15G 238B	2400	7	135				36	
9S/02E-01M01 M	15G 279	2400		114				37	
LIVERMORE VALLEY				2-10.00					
2S/02E-25N01 M		5100						48	
2S/01W-26C01 M		5100	2	360				48	
3S/01E-02E01 M		5100						48	
3S/01E-11H01 M		5100	7	303				49	
3S/02E-02R01 M		5100	2	437	1			48	
3S/02E-10H01 M		5100	2	376				48	

DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE: LOG	WATER ANAL	PROD REC	RECORD BEGINS	RECORD ENDS
HALF MOON BAY TERRACE				2-22.00					
5S/05W-20L01 M		5050	0	69				53	
5S/05W-29F03 M		5050	1					53	
5S/05W-29N01 M		5050	2	82				53	
6S/05W-06B01 M		5050	2	85				53	
SAN GREGORIO VALLEY				2-24.00					
7S/05W-13E01 M		5050	0	45				58	
7S/05W-15C01 M		5050	2	85				58	
7S/05W-15E01 M		5050	7					53	
7S/05W-15E02 M		5050	1					53	
7S/05W-15H02 M		5050	1					60	
PESCADERO VALLEY				2-26.00					
8S/05W-09H01 M		5050	2					53	
8S/05W-11M01 M		5050	1	36				53	

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE: LOG	WATER ANAL	PROD REC.	RECORD BEGINS	RECORD ENDS
CENTRAL COASTAL REGION									
SOQUEL VALLEY				3-01.00					
11S/01W-09L01 M		5050	0					48	
11S/01W-15H01 M		5050	0					48	
PAJARO VALLEY				3-02.00					
12S/01E-24G01 M		5050	2	200				47	
12S/02E-16J01 M		5050	2					47	
12S/02E-31K01 M		5050	2	219				47	
13S/02E-05B01 M		5050	0	225				58	
GILROY-HOLLISTER VALLEY				3-03.00					
SOUTH SANTA CLARA COUNTY				3-03.01					
9S/03E-27C02 M	18G 374	2400	7	300				43	
9S/03E-29B01 M		5050	0	170				48	
10S/03E-34L01 M		5050	2		1			48	
10S/04E-18G02 M		5050	7	184				48	
10S/04E-35E01 M		5050	2	447				48	
11S/03E-01B01 M		5400	2					57	
SAN BENITO COUNTY				3-03.02					
11S/05E-13D01 M		5050	2	125			2	37	
12S/04E-20C01 M		5101	2	736	1			49	
12S/05E-12F01 M		5050	0	88				51	63
12S/05E-33A01 M		5050	2	150				24	
13S/05E-11Q01 M		5101	0	44				24	

TABLE C-1

DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE: LOG	DATA AVAILABLE: WATER ANAL	DATA AVAILABLE: PROD REC	RECORD BEGINS	RECORD ENDS
SALINAS VALLEY						3-04.00			
PRESSURE AREA 180 FOOT AQUIFER						3-04.01			
14S/02E-03C01 M	2B 001	2100	2					31	
14S/02E-15L01 M	2C 025A	2100	2	176				16	
15S/02E-01Q01 M	2D 023	2100	7	196	1			31	
15S/03E-16M01 M	3D 040	2100	2					31	
15S/04E-33A01 M	4D 056	2100	2	279	1			31	
16S/04E-11D01 M	4E 030D	2100	1					31	
PRESSURE AREA 400 FOOT AQUIFER						3-04.01			
13S/02E-31Q01 M	1B 011A	2100	2	500	1			31	
14S/03E-18J01 M	2C 119	2100	2	513	1			31	
EAST SIDE AREA						3-04.02			
16S/05E-17R01 M	5E 026	2100	2	299				16	
FOREBAY AREA						3-04.03			
17S/05E-11C01 M	6F 017	2100	2	238	1			31	
ARROYO SECO CONE						3-04.04			
18S/06E-15M01 M	7G 029	2100	2	288	1			31	
19S/06E-11C01 M	7H 036	2100	2	320				44	
UPPER VALLEY AREA						3-04.05			
19S/07E-10P01 M	8H 031	2100	2	245				31	
20S/08E-05R01 M	9I 004	2100	2	372				16	
21S/09E-06K01 M	10J 001	2100	2					16	
21S/10E-32N01 M	11K 002	2100	2					31	
22S/10E-16K01 M	12K 003	2100	2					31	

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE: LOG	DATA AVAILABLE: WATER ANAL	DATA AVAILABLE: PROD REC	RECORD BEGINS	RECORD ENDS
PASO ROBLES						3-04.06			
24S/10E-11C01 M		5100							
24S/11E-25N01 M		5100							
24S/11E-33R01 M		5100							
24S/11E-35J01 M		5100							
24S/12E-17N01 M		5100							
24S/15E-33C01 M		5100							
25S/11E-35G01 M		5100							
25S/12E-17J01 M		5100							
25S/12E-17R01 M		5100							
25S/12E-26K01 M		5100							
25S/13E-11E01 M		5100							
25S/16E-17L01 M		5100							
25S/16E-30M01 M		5100							
26S/12E-04N01 M		5100							
26S/12E-26E01 M		5100							
26S/12E-35M01 M		5100							
26S/13E-10D01 M		5100							
26S/13E-34B01 M		5100							
26S/14E-16L01 M		5100							
26S/14E-35D01 M		5100							
26S/15E-02B01 M		5100							
26S/15E-28Q02 M		5100							
26S/15E-29N01 M		5100							

DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE			RECORD BEGINS	RECORD ENDS
					LOG	WATER ANAL.	PROD. REC.		
	PASO ROBLES			3-04.06					
27S/13E-24N01 M		5100							
27S/13E-32B01 M		5100							
27S/15E-10R02 M		5100							
27S/15E-13A01 M		5100							
27S/16E-21E02 M		5100							
28S/12E-10G01 M		5100							
28S/12E-10R02 M		5100							
28S/12E-13N01 M		5100							
28S/12E-14G01 M		5100							
28S/13E-04K01 M		5100							
28S/13E-04K02 M		5100							
28S/14E-07E01 M		5100							
28S/16E-23M01 M		5100							
29S/13E-05F03 M		5100							
29S/13E-05K02 M		5100							
29S/13E-06A01 M		5100							
29S/13E-19H01 M		5100							
	CARMEL VALLEY			3-07.00					
16S/01E-25B01 M		5050	7	60				52	
	WEST SANTA CRUZ TERRACE			3-26.00					
11S/02W-22K01 M		5050	2					54	

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE			RECORD BEGINS	RECORD ENDS
					LOG	WATER ANAL.	PROD. REC.		

TABLE C-2

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION					
POTTER VALLEY			1-14.00		
17N/11W-18J01 M	955.0	7-23-62	1.0	954.0	5000
		8-20-62	1.4*	953.6	
		9-18-62	.8	954.2	
		10-25-62	.3	955.3	
		11-26-62	.8	955.8	
		12-20-62	.8	955.8	
		1-21-63	.7	955.7	
		2-18-63	FLOW		
		3-19-63	FLOW		
		4-23-63	FLOW		
		5-20-63	.7	955.7	
		6-18-63	.4	954.6	
17N/11W-32J01 M	895.0	7-23-62	5.1*	889.9	5000
		8-20-62	2.1*	892.9	
		9-18-62	.6	894.4	
		10-25-62	1.3	893.7	
		11-00-62	□		
		12-20-62	1.6	893.4	
		1-21-63	1.9	893.1	
		2-18-63	.9	894.1	
		3-19-63	1.5	893.5	
		4-23-63	.7	894.3	
		5-20-63	2.3	892.7	
		6-18-63	3.6	891.4	
UKIAH VALLEY			1-15.00		
15N/12W-08L01 M	665.0	7-12-62	22.9	642.1	5000
		8-16-62	24.5	640.5	
		9-07-62	22.3	642.7	
		10-10-62	24.0	641.0	
		11-15-62	21.1	643.9	
		12-04-62	20.4	644.6	
		1-03-63	17.6	647.4	
		2-13-63	15.7	649.3	
		3-06-63	17.2	647.8	
		4-17-63	14.3	650.7	
		5-14-63	17.5	647.5	
		6-07-63	19.0	646.0	
15N/12W-21M01 M	590.0	7-12-62	8.3	581.7	5000
		8-16-62	12.9	577.1	
		9-07-62	13.5	576.5	
		10-10-62	13.6	576.4	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION					
UKIAH VALLEY			1-15.00		
15N/12W-21M01 M CONT.	590.0	11-15-62	9.0	581.0	5000
		12-04-62	5.9	584.1	
		1-03-63	2.4	587.6	
		2-13-63	.5	589.5	
		3-06-63	1.2	588.8	
		4-17-63	.5	589.5	
		5-14-63	1.4	588.6	
		6-07-63	2.7	587.3	
15N/12W-35M01 M	600.0	7-12-62	□		5000
		8-16-62	□		
		9-07-62	9.8	590.2	
		10-01-62	□		
		11-15-62	10.2	589.8	
		12-04-62	5.8*	594.2	
		1-03-63	6.4	593.6	
		2-13-63	2.9	597.1	
		3-06-63	4.2	595.8	
		4-17-63	2.0	598.0	
		5-14-63	3.5	596.5	
		6-07-63	4.5	595.5	
HOPLAND VALLEY			1-16.00		
13N/11W-18E01 M	490.0	7-12-62	□		5000
		8-16-62	□		
		9-07-62	□		
		10-10-62	12.1	477.9	
		11-15-62	11.4	478.6	
		12-04-62	9.8	480.2	
		1-03-63	11.1	478.9	
		2-13-63	7.7	482.3	
		3-06-63	11.0	479.0	
		4-17-63	5.9	484.1	
		5-14-63	9.7	480.3	
		6-07-63	11.6	478.4	
13N/11W-19P01 M	488.0	7-12-62	16.0	472.0	5000
		8-16-62	18.2	469.8	
		9-07-62	18.3	469.7	
		10-10-62	18.3	469.7	
		11-15-62	13.2	474.8	
		12-04-62	7.5	480.5	
		1-03-63	9.5	478.5	
		2-13-63	7.9	480.1	

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION					
HOPLAND VALLEY			1-16.00		
13N/11W-19P01 M	488.0	3-06-63	11.3	476.7	5000
CONT.		4-17-63	6.0	482.0	
		5-14-63	9.1	478.9	
		6-07-63	12.1	475.9	
13N/11W-20G01 M	515.0	7-12-62	8.3	506.7	5000
		8-16-62	11.7	503.3	
		9-07-62	12.6	502.4	
		10-10-62	12.8	502.2	
		11-15-62	5.5	509.5	
		12-04-62	4.4	510.6	
		1-03-63	4.1	510.9	
		2-13-63	3.7	511.3	
		3-06-63	4.4	510.6	
		4-17-63	3.9	511.1	
		5-14-63	4.4	510.6	
		6-07-63	5.6	509.4	
ALEXANDER VALLEY			1-17.00		
10N/09W-18B01 M	230.0	7-11-62	□		5000
		8-16-62	□		
		9-06-62	20.2	209.8	
		10-10-62	21.6	208.4	
		11-15-62	19.6	210.4	
		12-04-62	18.3	211.7	
		1-03-63	17.6	212.4	
		2-13-63	13.4	216.6	
		3-06-63	17.0	213.0	
		4-17-63	12.6	217.4	
		5-14-63	16.8	213.2	
		6-06-63	19.7	210.3	
10N/09W-26L02 M	205.0	7-11-62	13.9	191.1	5000
		8-16-62	18.0	187.0	
		9-06-62	□		
		10-10-62	20.7	184.3	
		11-15-62	11.8	193.2	
		12-04-62	11.0	194.0	
		1-03-63	4.5	200.5	
		2-13-63	.9	204.1	
		3-06-63	1.6	203.4	
		4-16-63	.3	204.7	
		5-14-63	.9	204.1	
		6-06-63	□		

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION					
ALEXANDER VALLEY			1-17.00		
10N/09W-33C01 M	180.0	7-11-62	7.5	172.5	5000
		8-16-62	8.5	171.5	
		9-06-62	8.7	171.3	
		10-10-62	9.0	171.0	
		11-15-62	6.6	173.4	
		12-04-62	6.6	173.4	
		1-03-63	5.7	174.3	
		2-13-63	1.6	178.4	
		3-06-63	5.6	174.4	
		4-16-63	1.8	178.2	
		5-13-63	4.6	175.4	
		6-06-63	7.3	172.7	
11N/10W-08P01 M	305.0	7-11-62	13.1	291.9	5000
		8-16-62	13.0	292.0	
		9-07-62	12.8	292.2	
		10-10-62	12.8	292.2	
		11-15-62	11.0	294.0	
		12-04-62	10.8	294.2	
		1-03-63	9.7	295.3	
		2-13-63	4.4	300.6	
		3-06-63	8.6	296.4	
		4-17-63	3.4	301.6	
		5-14-63	8.4	296.6	
		6-07-63	□		
11N/10W-17P02 M	292.0	7-11-62	□		5000
		8-16-62	□		
		9-07-62	9.4	282.6	
		10-10-62	9.8	282.2	
		11-15-62	8.7	283.3	
		12-04-62	12.5*	279.5	
		1-03-63	7.8	284.2	
		2-13-63	4.2	287.8	
		3-06-63	7.3	284.7	
		4-17-63	2.9	289.1	
		5-14-63	6.9	285.1	
		6-07-63	□		
11N/10W-19F02 M	346.0	7-12-62	9.1	336.9	5000
		8-16-62	□		
		9-07-62	11.6	334.4	
		10-10-62	13.1	332.9	
		11-15-62	□		
		12-04-62	5.5	340.5	

TABLE C-2

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION					
ALEXANDER VALLEY			1-17.00		
11N/10W-19F02 M	346.0	1-03-63	◻		5000
CONT.		2-13-63	2.4	343.6	
		3-06-63	3.4	342.6	
		4-17-63	.6	345.4	
		5-14-63	3.3	342.7	
		6-07-63	5.5	340.5	
SANTA ROSA VALLEY			1-18.00		
SANTA ROSA AREA			1-18.01		
6N/08W-07P02 M	95.0	7-10-62	26.7	68.3	5000
		8-14-62	27.5	67.5	
		9-04-62	26.1	68.9	
		10-09-62	25.5	69.5	
		11-14-62	19.8	75.2	
		12-03-62	20.7	74.3	
		1-02-63	16.0	79.0	
		2-12-63	15.2	79.8	
		3-05-63	19.5	75.5	
		4-16-63	12.1	82.9	
		5-13-63	◻		
		6-06-63	13.1	81.9	
6N/08W-13R01 M	115.0	7-10-62	20.1	94.9	5000
		8-14-62	22.5*	92.5	
		9-04-62	24.3	90.7	
		10-09-62	24.2	90.8	
		11-14-62	23.8	91.2	
		12-03-62	21.4	93.6	
		1-02-63	19.7	95.3	
		2-12-63	16.9	98.1	
		3-05-63	16.9	98.1	
		4-16-63	13.8	101.2	
		5-13-63	12.1	102.9	
		6-06-63	13.6	101.4	
7N/07W-06R01 M	275.0	4-12-63	14.1	260.9	5050
7N/08W-31C01 M	85.0	4-12-63	8.8	76.2	5050
7N/09W-35D02 M	135.0	4-12-63	32.0	103.0	5050

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION					
SANTA ROSA AREA			1-18.01		
8N/09W-36N01 M	90.0	9-04-62	12.0	78.0	5000
CONT.		10-09-62	12.6	77.4	
		11-14-62	11.4	78.6	
		12-03-62	11.2	78.8	
		1-02-63	9.1	80.9	
		2-12-63	3.4	86.6	
		3-05-63	4.5	85.5	
		4-16-63	2.5	87.5	
		5-13-63	◻		
		6-06-63	5.6	84.4	
HEALDSBURG AREA			1-18.02		
8N/09W-03P01 M	77.0	7-11-62	◻		5000
		8-15-62	5.7	71.3	
		9-06-62	3.4	73.6	
		10-10-62	5.4	71.6	
		11-14-62	◻		
		12-03-62	◻		
		1-03-63	◻		
		2-12-63	◻		
		3-05-63	2.3	74.7	
		4-16-63	◻		
		5-13-63	◻		
		6-06-63	5.5	71.5	
8N/09W-22L01 M	67.0	7-11-62	◻		5000
		8-15-62	◻		
		9-06-62	27.6	39.4	
		10-10-62	◻		
		11-14-62	26.7	40.3	
		12-03-62	26.0	41.0	
		1-03-63	25.3	41.7	
		2-12-63	21.3	45.7	
		3-05-63	23.5	43.5	
		4-16-63	20.1	46.9	
		5-13-63	22.8	44.2	
		6-06-63	23.9	43.1	
9N/09W-28N01 M	90.0	7-11-62	18.5	71.5	5000
		8-15-62	20.6	69.4	
		9-06-62	21.4	68.6	
		10-10-62	21.8	68.2	
		11-15-62	15.0	75.0	

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION					
HEALDSBURG AREA			1-18.02		
9N/09W-28N01 M	90.0	1-03-63	13.8	76.2	5000
CONT.		2-13-63	10.8	79.2	
		3-05-63	13.8	76.2	
		4-16-63	10.7	79.3	
		5-13-63	13.6	76.4	
		6-06-63	14.2	75.8	
10N/10W-35Q01 M	142.0	7-00-62	□		5000
		8-15-62	5.1	136.9	
		9-06-62	6.6	135.4	
		10-10-62	6.8	135.2	
		11-15-62	5.3	136.7	
		12-04-62	4.9	137.1	
		1-03-63	2.3	139.7	
		2-13-63	1.1	140.9	
		3-05-63	1.8	140.2	
		4-16-63	1.2	140.8	
		5-13-63	1.8	140.2	
		6-06-63	2.7	139.3	
LOWER RUSSIAN RIVER VALLEY			1-98.00		
7N/10W-06N01 M	25.0	7-11-62	21.0	4.0	5000
		8-15-62	22.1	2.9	
		9-06-62	22.7	2.3	
		10-10-62	22.5	2.5	
		11-14-62	20.3	4.7	
		12-03-62	15.0	10.0	
		1-03-63	18.9	6.1	
		2-12-63	14.8	10.2	
		3-05-63	19.2	5.8	
		4-16-63	14.7	10.3	
		5-13-63	17.9	7.1	
		6-06-63	19.9	5.1	
7N/11W-14E01 M	25.0	7-11-62	34.1*	- 9.1	5000
		8-15-62	19.2	5.8	
		9-06-62	19.4	5.6	
		10-10-62	24.3	0.7	
		11-14-62	18.1	6.9	
		12-03-62	17.3	7.7	
		1-03-63	18.4	6.6	
		2-12-63	13.7	11.3	
		3-05-63	17.7	7.3	
		4-16-63	10.4	14.6	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION					
LOWER RUSSIAN RIVER VALLEY			1-98.00		
7N/11W-14E01 M	25.0	5-13-63	16.6	8.4	5000
CONT.		6-06-63	18.4	6.6	

TABLE C-2

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
PETALUMA VALLEY			2-01.00		
3N/06W-01Q01 M	2.0	4-12-63	1.4	0.6	5050
5N/07W-20B02 M	41.0	8-14-62	92.3	- 51.3	5000
		9-04-62	80.7*	- 39.7	
		10-09-62	77.2	- 36.2	
		11-14-62	72.6	- 31.6	
		12-03-62	69.3	- 28.3	
		1-02-63	66.6	- 25.6	
		2-12-63	63.8	- 22.8	
		3-05-63	63.4	- 22.4	
		4-16-63	63.2	- 22.2	
		5-13-63	61.7	- 20.7	
		6-06-63	65.6	- 24.6	
5N/07W-21H01 M	65.0	7-10-62	□		5000
		8-14-62	□		
		9-04-62	46.4	18.6	
		10-09-62	49.1	15.9	
		11-14-62	48.3	16.7	
		12-03-62	48.6	16.4	
		1-02-63	47.8	17.2	
		2-12-63	42.3	22.7	
		3-05-63	41.3*	23.7	
		4-16-63	35.5	29.5	
		5-13-63	32.6	32.4	
		6-06-63	32.7	32.3	
5N/07W-26R01 M	53.6	7-10-62	27.9	25.7	5000
		8-14-62	28.2	25.4	
		9-04-62	28.9	24.7	
		10-09-62	28.1	25.5	
		11-14-62	29.1	24.5	
		12-03-62	29.2	24.4	
		1-02-63	28.1	25.5	
		2-12-63	27.2	26.4	
		3-05-63	24.8	28.8	
		4-16-63	21.7	31.9	
		5-13-63	20.3	33.3	
		6-06-63	19.9	33.7	
5N/07W-35K01 M	18.8	4-12-63	7.2	11.6	5050

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NAPA-SONOMA VALLEY			2-02.00		
NAPA VALLEY			2-02.01		
4N/04W-13E01 M	41.0	7-10-62	□		5000
		8-16-62	□		
		9-04-62	□		
		10-09-62	□		
		11-15-62	#		
5N/04W-11M01 M	13.0	7-10-62	8.7	4.3	5000
		8-14-62	9.3	3.7	
		9-04-62	9.5	3.5	
		10-09-62	8.9	4.1	
		11-14-62	7.3	5.7	
		12-03-62	7.2	5.8	
		1-02-63	6.6	6.4	
		2-12-63	4.0	9.0	
		3-05-63	6.0	7.0	
		4-16-63	3.8	9.2	
		5-13-63	4.1	8.9	
		6-06-63	7.7	5.3	
6N/04W-17A01 M	67.0	7-12-62	12.6	54.4	5000
		8-16-62	14.8	52.2	
		9-18-62	18.5	48.5	
		10-11-62	22.3	44.7	
		11-15-62	9.9	57.1	
		12-04-62	9.6	57.4	
		1-04-63	8.4	58.6	
		2-13-63	1.3	65.7	
		3-06-63	2.2	64.8	
		4-17-63	.8	66.2	
		5-14-63	2.1	64.9	
		6-07-63	4.9	62.1	
7N/05W-09Q01 M	155.0	4-09-63	6.6	148.4	5101
7N/05W-09Q02 M	155.0	7-12-62	24.2*	130.8	5000
		8-16-62	14.6	140.4	
		9-18-62	26.6*	128.4	
		10-11-62	14.4	140.6	
		11-15-62	10.4	144.6	
		12-04-62	11.4	143.6	
		1-04-63	12.4	142.6	
		2-13-63	6.0	149.0	
		3-06-63	8.4	146.6	

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NAPA VALLEY			2-02.01		
7N/05W-09Q02 M	155.0	4-09-63	6.2	148.8	5101
CONT.		4-17-63	5.9	149.1	5000
		5-14-63	7.4	147.6	
		6-07-63	8.5	146.5	
7N/05W-09Q03 M	155.0	4-09-63	2.9	152.1	5101
7N/05W-23D02 M	127.0	4-10-63	.2	126.8	5101
8N/06W-10Q01 M	290.0	7-12-62	5.9	284.1	5000
		8-16-62	8.5	281.5	
		9-18-62	10.2	279.8	
		10-11-62	9.6	280.4	
		11-15-62	5.8	284.2	
		12-04-62	4.4	285.6	
		1-04-63	2.2	287.8	
		2-13-63	.9	289.1	
		3-06-63	1.5	288.5	
		4-17-63	1.1	288.9	
		5-14-63	1.5	288.5	
		6-07-63	2.5	287.5	
SONOMA VALLEY			2-02.02		
5N/05W-17C01 M	85.0	7-10-62	13.4	71.6	5000
		8-14-62	19.1	65.9	
		9-04-62	19.6	65.4	
		10-09-62	19.9	65.1	
		11-14-62	17.4	67.6	
		12-03-62	17.7	67.3	
		1-02-63	14.5	70.5	
		2-12-63	12.2	72.8	
		3-05-63	[illegible]		
		4-12-63	12.4	72.6	5050
		4-16-63	12.4	72.6	5000
		5-13-63	19.1	65.9	
		6-06-63	15.7	69.3	
5N/05W-28N01 M	11.0	4-12-63	6.8	4.2	5050
5N/05W-29N01 M	16.0	7-10-62	10.5	5.5	5000
		8-14-62	12.5	3.5	
		9-04-62	12.0	4.0	
		10-09-62	13.6	2.4	
		11-14-62	11.5	4.5	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
SONOMA VALLEY			2-02.02		
5N/05W-29N01 M	16.0	12-03-62	11.4	4.6	5000
CONT.		1-02-63	20.5*	- 4.5	
		2-12-63	6.3	9.7	
		3-05-63	7.0	9.0	
		4-16-63	4.0	12.0	
		5-13-63	6.6	9.4	
		6-06-63	7.9	8.1	
SUISUN-FAIRFIELD VALLEY			2-03.00		
4N/02W-06A01 M	35.0	3-30-63	9.1	25.9	5109
4N/02W-09A01 M	7.0	3-19-63	3.1	3.9	5109
4N/03W-01D01 M	37.0	3-19-63	3.6	33.4	5109
5N/01E-36A01 M	24.0	3-19-63	9.7	14.3	5109
5N/01W-07E01 M	115.0	3-18-63	13.1	101.9	5109
5N/01W-28P01 M	15.0	3-19-63	5.9	9.1	5109
5N/02W-17D02 M	101.0	3-18-63	4.2	96.8	5109
5N/02W-27J02 M	24.0	7-10-62	29.1	- 5.1	5000
		8-14-62	28.9	- 4.9	
		9-04-62	29.0	- 5.0	
		10-09-62	29.4	- 5.4	
		11-14-62	27.1	- 3.1	
		12-03-62	28.0	- 4.0	
		1-02-63	24.6	- 0.6	
		2-12-63	17.2	6.8	
		3-05-63	19.5	4.5	
		3-19-63	19.5	4.5	5109
		4-16-63	15.5	8.5	5000
		5-13-63	16.4	7.6	
		6-06-63	18.2	5.8	
5N/02W-29R01 M	46.0	3-18-63	9.6	36.4	5109
5N/02W-30J01 M	65.0	7-10-62	26.9	38.1	5000
		8-14-62	24.7	40.3	
		9-04-62	24.2	40.8	
		10-09-62	26.1	38.9	
		11-14-62	23.8	41.2	

TABLE C-2

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
SUISUN-FAIRFIELD VALLEY			2-03.00		
5N/02W-30J01 M	65.0	12-03-62	24.0	41.0	5000
CONT.		1-02-63	23.9	41.1	
		2-12-63	21.3	43.7	
		3-05-63	20.4	44.6	
		3-18-63	20.4	44.6	5109
		4-16-63	18.9	46.1	5000
		5-13-63	18.9	46.1	
		6-06-63	20.6	44.4	
5N/03W-26F02 M	111.0	3-19-63	3.2	107.8	5109
YGNACIO VALLEY			2-06.00		
1N/01W-07K01 M	83.0	7-19-62	11.7	71.3	5050
		8-15-62	12.0	71.0	
		9-20-62	11.6	71.4	
		10-19-62	10.8	72.2	
		11-14-62	9.3	73.7	
		12-19-62	12.1	70.9	
		1-21-63	9.5	73.5	
		2-20-63	7.7	75.3	
		3-20-63	7.4	75.6	
		4-25-63	6.4	76.6	
		5-25-63	7.8	75.2	
		6-20-63	9.7	73.3	
1N/02W-11N01 M	63.0	3-20-63	12.2	50.8	5050
2N/02W-27R01 M	15.0	7-19-62	6.2	8.8	5050
		8-15-62	6.3	8.7	
		9-20-62	4.9	10.1	
		10-19-62	4.5	10.5	
		11-19-62	2.3	12.7	
		12-16-62	1.7	13.3	
		1-21-63	2.0	13.0	
		2-20-63	1.4	13.6	
		3-21-63	1.0	14.0	
		4-25-63	.9	14.1	
		5-20-63	2.2	12.8	
		6-20-63	6.0	9.0	
2N/02W-36E01 M	48.0	3-21-63	13.7	34.3	5050

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
SANTA CLARA VALLEY			2-09.00		
SOUTH ALAMEDA COUNTY UPR AQUIFER			2-09.01		
3S/02W-08R05 M	64.0	9-00-62	37.5	26.5	5100
		12-00-62	34.2	29.8	
		4-00-63	32.5	31.5	
3S/03W-24Q02 M	7.0	9-00-62	7.8	- 0.8	5100
		4-00-63	2.5	4.5	
4S/01W-18G01 M	41.0	7-20-62	104.0	- 63.0	5401
		8-24-62	104.1	- 63.1	
		9-14-62	104.6	- 63.6	
		10-12-62	104.4	- 63.4	
		11-23-62	101.1	- 60.1	
		12-21-62	95.3	- 54.3	
		1-18-63	92.3	- 51.3	
		2-15-63	89.2	- 48.2	
		3-15-63	81.1	- 40.1	
		4-26-63	76.7	- 35.7	
		5-24-63	75.8	- 34.8	
		6-21-63	78.1	- 37.1	
4S/01W-22P05 M	80.0	9-00-62	48.0	32.0	5100
		4-00-63	41.5	38.5	
4S/01W-29C04 M	55.0	7-20-62	104.3	- 49.3	5401
		8-17-62	107.2	- 52.2	
		9-21-62	109.3	- 54.3	
		10-19-62	108.7	- 53.7	
		3-22-63	88.9	- 33.9	
4S/02W-13C02 M	36.4	7-20-62	82.9	- 46.5	5401
		8-17-62	84.9	- 48.5	
		9-00-62	#		
4S/02W-24Q02 M	33.4	9-00-62	87.9	- 54.5	5100
		4-00-63	73.1	- 39.7	
5S/01W-04F01 M	42.0	7-20-62	74.6	- 32.6	5401
		8-24-62	75.4	- 33.4	
		9-21-62	75.8	- 33.8	
		10-19-62	76.0	- 34.0	
		11-16-62	75.9	- 33.9	
		12-14-62	75.9	- 33.9	
		1-25-63	75.4	- 33.4	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
SOUTH ALAMEDA COUNTY UPR AQUIFER		2-09.01			
5S/01W-04F01 M	42.0	2-22-63	75.1	- 33.1	5401
CONT.		3-22-63	74.5	- 32.5	
		4-19-63	73.9	- 31.9	
		5-17-63	73.4	- 31.4	
		6-14-63	72.6	- 30.6	
5S/01W-09Q01 M	19.8	9-00-62	44.5	- 24.7	5100
		4-00-63	44.5	- 24.7	
SOUTH ALAMEDA COUNTY LWR AQUIFER		2-09.01			
2S/03W-36R01 M	45.0	9-00-62	82.1	- 37.1	5100
		4-00-63	90.0	- 45.0	
3S/02W-07D01 M	31.0	9-00-62	@		5100
3S/02W-19A02 M	30.0	7-20-62	23.1	6.9	5050
		8-15-62	25.3	4.7	
		9-20-62	27.6	2.4	
		10-00-62	27.0	3.0	5100
		10-17-62	26.8	3.2	5050
		11-19-62	24.9	5.1	
		12-19-62	□		
		1-21-63	22.2	7.8	
		2-20-63	20.6	9.4	
		3-20-63	20.0	10.0	
		4-00-63	19.5	10.5	5100
		4-24-63	18.9	11.1	5050
		5-20-63	19.1	10.9	
		6-20-63	19.6	10.4	
3S/03W-24J01 M	11.0	9-00-62	86.5	- 75.5	5100
		4-00-63	72.0	- 61.0	
4S/02W-02Q01 M	26.0	9-00-62	167.0*	- 141.0	5100
		9-28-62	147.6	121.6	5401
		10-26-62	139.2	- 113.2	
		4-00-63	82.5	- 56.5	5100
4S/02W-35R02 M	15.0	7-20-62	97.1	- 82.1	5401
		8-24-62	104.0	- 89.0	
		9-21-62	101.9	- 86.9	
		10-19-62	90.2	- 75.2	
		11-16-62	81.8	- 66.8	
		12-14-62	74.6	- 59.6	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
SOUTH ALAMEDA COUNTY LWR AQUIFER		2-09.01			
4S/02W-35R02 M	15.0	1-11-63	69.0	- 54.0	5401
CONT.		2-22-63	61.1	- 46.1	
		3-22-63	57.9	- 42.9	
		4-19-63	51.8	- 36.8	
		5-17-63	53.8	- 38.8	
		6-14-63	67.8	- 52.8	
4S/02W-36K01 M	24.0	7-20-62	109.7	- 85.7	5401
		8-24-62	112.6	- 88.6	
		9-21-62	111.5	- 87.5	
		10-19-62	100.3	- 76.3	
		11-16-62	91.9	- 67.9	
		12-14-62	84.7	- 60.7	
		1-18-63	79.7	- 55.7	
		2-22-63	72.3	- 48.3	
		3-22-63	69.8	- 45.8	
		4-19-63	62.5	- 38.5	
		5-17-63	66.0	- 42.0	
		6-14-63	80.1	- 56.1	
5S/01W-09M01 M	15.0	9-00-62	111.3	- 96.3	5100
		4-00-63	57.8	- 42.8	
NORTH SANTA CLARA COUNTY		2-09.02			
6S/01E-07E01 M	15.8	7-24-62	138.8	- 123.0	2400
		8-21-62	138.9	- 123.1	
		9-21-62	138.8	- 123.0	
		10-22-62	121.1	- 105.3	
		11-21-62	112.1	- 96.3	
		12-21-62	103.1	- 87.3	
		1-22-63	97.9	- 82.1	
		2-20-63	92.1	- 76.3	
		3-20-63	88.7	- 72.9	
		4-22-63	82.2	- 66.4	
		5-21-63	85.4	- 69.6	
		6-25-63	120.8	- 105.0	
6S/01E-21R01 M	138.0	7-23-62	248.4	- 110.4	2400
		8-20-62	253.0	- 115.0	
		9-20-62	□		
		10-19-62	249.3	- 111.3	
		11-20-62	242.8	- 104.8	
		12-20-62	232.1	- 94.1	
		1-17-63	218.4	- 80.4	

TABLE C-2

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY		2-09.02			
6S/01E-21R01 M CONT.	138.0	2-19-63	□		2400
		3-13-63	217.3	- 79.3	
		4-22-63	213.1	- 75.1	
		5-21-63	213.1	- 75.1	
		6-24-63	□		
6S/01E-23P02 M	240.5	7-23-62	167.3	73.2	2400
		8-17-62	167.6	72.9	
		9-18-62	168.6	71.9	
		10-18-62	168.8	71.7	
		11-19-62	170.8	69.7	
		12-19-62	170.6	69.9	
		1-16-63	171.1	69.4	
		2-18-63	171.6	68.9	
		3-19-63	170.7	69.8	
		4-18-63	166.2	74.3	
		5-20-63	155.0	85.5	
		6-24-63	156.1	84.4	
6S/01E-30M01 M	43.0	7-25-62	171.0*	- 128.0	2400
		8-22-62	□		
		9-21-62	165.1*	- 122.1	
		10-23-62	141.1	- 98.1	
		11-26-62	131.9	- 88.9	
		12-24-62	123.8	- 80.8	
		1-23-63	120.7	- 77.7	
		2-21-63	115.8	- 72.8	
		3-21-63	105.2	- 62.2	
		4-23-63	102.7	- 59.7	
		5-22-63	104.8	- 61.8	
		6-25-63	□		
6S/01W-10P02 M	9.0	7-18-62	□		5000
		8-13-62	131.4	- 122.4	
		9-11-62	□		
		10-17-62	□		
		11-14-62	□		
		12-21-62	#		
6S/01W-23E01 M	21.0	7-18-62	174.6*	- 153.6	5000
		8-13-62	145.7	- 124.7	
		9-11-62	149.6	- 128.6	
		10-17-62	119.0	- 98.0	
		11-14-62	114.3	- 93.3	
		12-21-62	106.3	- 85.3	
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY		2-09.02			
6S/01W-23E01 M CONT.	21.0	1-23-63	107.7	- 86.7	5000
		2-21-63	99.9	- 78.9	
		3-22-63	98.1	- 77.1	
		4-00-63	□		
		5-20-63	93.8	- 72.8	
		6-17-63	152.8*	- 131.8	
6S/02W-16R01 M	48.0	7-27-62	□		2400
		8-27-62	153.3	- 105.3	
		9-26-62	150.2	- 102.2	
		10-29-62	139.1	- 91.1	
		11-28-62	137.1	- 89.1	
		12-27-62	133.2	- 85.2	
		1-28-63	133.9	- 85.9	
		2-26-63	130.2	- 82.2	
		3-27-63	127.5	- 79.5	
		4-26-63	124.5	- 76.5	
		5-27-63	130.9	- 82.9	
		6-26-63	141.8	- 93.8	
6S/02W-25C01 M	73.0	7-26-62	158.7	- 85.7	2400
		8-24-62	154.9	- 81.9	
		9-25-62	157.3	- 84.3	
		10-24-62	149.3	- 76.3	
		11-27-62	145.8	- 72.8	
		12-26-62	137.2	- 64.2	
		1-25-63	130.4	- 57.4	
		2-26-63	135.3	- 62.3	
		3-25-63	138.3	- 65.3	
		4-25-63	137.9	- 64.9	
		5-24-63	143.7	- 70.7	
		6-26-63	150.3	- 77.3	
6S/02W-35C01 M	140.1	7-27-62	271.4	- 131.3	2400
		8-24-62	274.7	- 134.6	
		9-25-62	271.5	- 131.4	
		10-25-62	260.1	- 120.0	
		11-28-62	259.9	- 119.8	
		12-27-62	256.7	- 116.6	
		1-28-63	233.3	- 93.2	
		2-26-63	234.7	- 94.6	
		3-25-63	236.4	- 96.3	
		4-25-63	225.6	- 85.5	
		5-27-63	225.1	- 85.0	
		6-26-63	□		

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY		2-09.02			
7S/01E-01K01 M	179.0	7-20-62	207.1	- 28.1	2400
		8-16-62	212.4	- 33.4	
		9-18-62	206.9	- 27.9	
		10-18-62	204.2	- 25.2	
		11-19-62	205.1	- 26.1	
		12-18-62	203.7	- 24.7	
		1-15-63	202.8	- 23.8	
		2-15-63	201.8	- 22.8	
		3-18-63	200.7	- 21.7	
		4-18-63	199.3	- 20.3	
		5-17-63	201.4	- 22.4	
		6-13-63	199.9	- 20.9	
7S/01E-08L01 M	88.0	7-20-62	173.8	- 85.8	2400
		8-23-62	171.7	- 83.7	
		9-20-62	177.5	- 89.5	
		10-16-62	171.4	- 83.4	
		11-20-62	165.8	- 77.8	
		12-27-62	156.6	- 68.6	
		1-23-63	151.1	- 63.1	
		2-26-63	147.2	- 59.2	
		3-26-63	154.6	- 66.6	
		4-26-63	144.9	- 56.9	
		5-24-63	140.4	- 52.4	
		6-25-63	153.3	- 65.3	
7S/01E-09D02 M	95.9	7-01-62	199.0	- 103.1	2400
		7-26-62	205.0	- 109.1	
		9-01-62	206.0	- 110.1	
		10-01-62	210.0	- 114.1	
		11-01-62	185.0*	- 89.1	
		12-01-62	192.0	- 96.1	
		1-01-63	185.0	- 89.1	
		2-01-63	185.0	- 89.1	
		3-01-63	172.0	- 76.1	
		4-01-63	165.0	- 69.1	
		5-00-63	◻		
		6-27-63	177.0	- 81.1	
7S/01E-16C05 M	105.0	7-18-62	249.0	- 144.0	5000
		8-13-62	253.3	- 148.3	
		9-11-62	◻		
		10-17-62	242.5	- 137.5	
		11-14-62	232.0	- 127.0	
		12-21-62	◻		

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY		2-09.02			
7S/01E-16C05 M CONT.	105.0	1-23-63	217.0	- 112.0	5000
		2-21-63	198.2	- 93.2	
		3-22-63	182.4	- 77.4	
		4-00-63	◻		
		5-20-63	179.8	- 74.8	
		6-17-63	212.7*	- 107.7	
7S/01E-31A02 M	151.6	7-31-62	199.2	- 47.6	2400
		8-03-62	199.2	- 47.6	
		9-05-62	211.5*	- 59.9	
		10-04-62	201.7	- 50.1	
		11-06-62	199.5	- 47.9	
		12-04-62	198.7	- 47.1	
		1-03-63	168.8	- 17.2	
		2-04-63	161.7	- 10.1	
		3-05-63	142.9	8.7	
		4-02-63	144.8	6.8	
		5-06-63	144.3	7.3	
		6-04-63	157.1	- 5.5	
7S/01E-31R01 M	160.0	7-04-62	159.4	0.6	2400
		8-06-62	154.8	5.2	
		9-06-62	151.2	8.8	
		10-01-62	143.8	16.2	
		11-06-62	148.3	11.7	
		12-05-62	◉		
7S/02E-07P01 M	130.0	7-20-62	157.4*	- 27.4	2400
		8-16-62	149.6	- 19.6	
		9-18-62	145.6	- 15.6	
		10-18-62	138.9	- 8.9	
		11-19-62	143.8	- 13.8	
		12-18-62	140.7	- 10.7	
		1-15-63	136.3	- 6.3	
		2-15-63	136.6	- 6.6	
		3-18-63	135.7	- 5.7	
		4-18-63	135.1	- 5.1	
		5-20-63	136.4	- 6.4	
		6-13-63	138.3*	- 8.3	
7S/02E-17H01 M	349.0	7-19-62	102.7	246.3	2400
		8-29-62	99.4	249.6	
		9-18-62	104.5	244.5	
		10-17-62	100.7	248.3	
		11-16-62	99.1	249.9	

TABLE C-2

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY			2-09.02		
7S/02E-17H01 M	349.0	12-18-62	95.3	253.7	2400
CONT.		1-15-63	93.9	255.1	
		2-15-63	98.6	250.4	
		3-18-63	96.3	252.7	
		4-17-63	95.7	253.3	
		5-17-63	99.1	249.9	
		6-13-63	100.5	248.5	
7S/02E-33C01 M	462.0	7-19-62	23.4	438.6	2400
		8-15-62	22.3	439.7	
		9-17-62	22.7	439.3	
		10-17-62	22.4	439.6	
		11-16-62	20.9	441.1	
		12-14-62	22.3	439.7	
		1-14-63	21.7	440.3	
		2-14-63	20.3	441.7	
		3-15-63	20.7	441.3	
		4-17-63	18.8	443.2	
		5-17-63	18.3	443.7	
		6-13-63	20.7	441.3	
7S/01W-35C01 M	202.0	7-02-62	245.0	- 43.0	2400
		8-01-62	232.0	- 30.0	
		9-01-62	227.0	- 25.0	
		10-02-62	236.0	- 34.0	
		11-01-62	242.0	- 40.0	
		12-03-62	247.0	- 45.0	
		1-02-63	247.0	- 45.0	
		2-01-63	245.0	- 43.0	
		3-01-63	232.0	- 30.0	
		4-01-63	217.0	- 15.0	
		5-01-63	204.0	- 2.0	
		6-01-63	195.0	7.0	
7S/02W-03Q01 M	216.7	7-07-62	350.0	- 133.3	2400
		8-28-62	343.0*	- 126.3	
		9-01-62	347.0	- 130.3	
		10-06-62	360.0*	- 143.3	
		11-05-62	352.0	- 135.3	
		12-03-62	350.0	- 133.3	
		1-05-63	342.0	- 125.3	
		2-05-63	338.0	- 121.3	
		3-07-63	339.0	- 122.3	
		4-02-63	338.0	- 121.3	
		5-07-63	333.0	- 116.3	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY			2-09.02		
7S/02W-03Q01 M	216.7	6-02-63	345.0	- 128.3	2400
CONT.					
7S/02W-04B01 M	218.0	7-30-62	248.6	- 30.6	2400
		8-28-62	254.8	- 36.8	
		9-26-62	248.7	- 30.7	
		10-29-62	232.3	- 14.3	
		11-28-62	213.4	4.6	
		12-18-62	200.9	17.1	
		1-28-63	195.7	22.3	
		2-27-63	194.9	23.1	
		3-27-63	195.2	22.8	
		4-27-63	193.7	24.3	
		5-27-63	193.1	24.9	
		6-27-63	193.9	24.1	
7S/02W-22A01 M	340.0	7-30-62	▫		2400
		8-28-62	▫		
		9-26-62	▫		
		10-29-62	▫		
		11-29-62	26.1	313.9	
		12-28-62	23.2	316.8	
		1-29-63	25.6	314.4	
		2-27-63	15.8	324.2	
		3-28-63	14.1	325.9	
		4-27-63	13.3	326.7	
		5-28-63	14.9	325.1	
		6-27-63	▫		
8S/01E-07H02 M	207.0	7-09-62	98.1	108.9	2400
		8-06-62	92.0	115.0	
		9-06-62	89.1	117.9	
		10-16-62	93.7	113.3	
		11-07-62	87.8	119.2	
		12-05-62	85.6	121.4	
		1-04-63	84.6	122.4	
		2-05-63	81.9	125.1	
		3-06-63	73.4	133.6	
		4-03-63	67.4	139.6	
		5-08-63	64.9	142.1	
		6-05-63	▫		
8S/01E-13H01 M	184.6	7-31-62	47.8	136.8	2400
		8-08-62	45.1	139.5	
		9-11-62	41.8	142.8	
		10-26-62	39.1	145.5	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY			2-09.02		
8S/01E-13H01 M	184.6	11-08-62	39.1	145.5	2400
CONT.		12-06-62	39.8	144.8	
		1-07-63	40.7	143.9	
		2-06-63	35.4	149.2	
		3-07-63	32.0	152.6	
		4-04-63	32.7	151.9	
		5-09-63	28.7	155.9	
		6-06-63	31.1	153.5	
8S/02E-20F03 M	209.0	7-11-62	44.7	164.3	2400
		8-08-62	□		
		9-11-62	48.2	160.8	
		10-26-62	50.0	159.0	
		11-08-62	50.0	159.0	
		12-07-62	50.7	158.3	
		1-08-63	51.9	157.1	
		2-07-63	50.0	159.0	
		3-11-63	42.7	166.3	
		4-08-63	38.8	170.2	
		5-10-63	35.3	173.7	
		6-06-63	23.7*	185.3	
8S/02E-22D01 M	239.7	7-11-62	12.6	227.1	2400
		8-09-62	19.3	220.4	
		9-11-62	24.4	215.3	
		10-10-62	26.3	213.4	
		11-08-62	23.9	215.8	
		12-07-62	25.1	214.6	
		1-08-63	26.0	213.7	
		2-07-63	12.8	226.9	
		3-11-63	14.2	225.5	
		4-08-63	14.7	225.0	
		5-10-63	10.2	229.5	
		6-07-63	11.0	228.7	
8S/01W-15B01 M	331.2	7-06-62	33.3	297.9	2400
		8-03-62	34.2	297.0	
		9-05-62	35.1	296.1	
		10-29-62	33.9	297.3	
		11-06-62	33.9	297.3	
		12-04-62	32.2	299.0	
		1-03-63	32.0	299.2	
		2-04-63	39.1	292.1	
		3-05-63	30.3	300.9	
		4-02-63	30.7	300.5	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY			2-09.02		
8S/01W-15B01 M	331.2	5-07-63	31.5	299.7	2400
CONT.		6-04-63	33.4	297.8	
9S/02E-01J01 M	314.6	7-17-62	30.2	284.4	2400
		8-13-62	38.1	276.5	
		9-13-62	44.3	270.3	
		10-10-62	57.1*	257.5	
		11-13-62	41.7	272.9	
		12-12-62	43.7	270.9	
		1-10-63	43.1	271.5	
		2-08-63	34.7	279.9	
		3-12-63	25.3	289.3	
		4-11-63	22.9	291.7	
		5-10-63	26.7	287.9	
		6-11-63	34.6	280.0	
9S/02E-01M01 M	287.6	7-12-62	25.1	262.5	2400
		8-09-62	25.1	262.5	
		9-12-62	26.9	260.7	
		10-08-62	29.9	257.7	
		11-09-62	30.3	257.3	
		12-10-62	31.1	256.5	
		1-08-63	30.2	257.4	
		2-07-63	27.4	260.2	
		3-11-63	23.0	264.6	
		4-08-63	21.8	265.8	
		5-10-63	17.1	270.5	
		6-29-63	18.0	269.6	
LIVERMORE VALLEY			2-10.00		
2S/02E-25N01 M	555.3	9-01-62	12.0	543.3	5100
		3-00-63	11.2	544.1	
2S/01W-26C01 M	416.9	9-01-62	112.3	304.6	5100
		3-00-63	92.4	324.5	
3S/01E-02E01 M	361.0	9-00-62	#		5100
3S/01E-11H01 M	372.9	9-01-62	150.5	222.4	5100
		3-00-63	117.5	255.4	
3S/02E-02R01 M	562.2	9-01-62	139.4	422.8	5100
		3-00-63	□		
3S/02E-10H01 M	551.0	9-01-62	□		5100

TABLE C-2

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
LIVERMORE VALLEY			2-10.00		
3S/02E-10H01 M CONT.	551.0	3-00-63	94.3	456.7	5100
HALF MOON BAY TERRACE			2-22.00		
5S/05W-20L01 M	73.0	7-18-62	24.0	49.0	5050
		8-17-62	24.2	48.8	
		9-18-62	21.6	51.4	
		10-18-62	19.5	53.5	
		11-21-62	17.5	55.5	
		12-21-62	15.9	57.1	
		1-23-63	15.2	57.8	
		2-20-63	12.3	60.7	
		3-18-63	13.2	59.8	
		4-24-63	10.9	62.1	
		5-23-63	11.5	61.5	
		6-19-63	12.5	60.5	
5S/05W-29F03 M	50.0	3-19-63	#		5050
5S/05W-29N01 M	46.0	3-19-63	29.8	16.2	5050
6S/05W-08B01 M	108.0	3-19-63	59.2	48.8	5050
SAN GREGORIO VALLEY			2-24.00		
7S/05W-13E01 M	80.0	7-18-62	12.6	67.4	5050
		8-17-62	13.2	66.8	
		9-18-62	13.3	66.7	
		10-18-62	13.5	66.5	
		11-21-62	10.7	69.3	
		12-21-62	10.1	69.9	
		1-23-63	10.7	69.3	
		2-20-63	8.9	71.1	
		3-19-63	9.7	70.3	
		4-24-63	10.3	69.7	
		5-23-63	11.1	68.9	
		6-19-63	11.4	68.6	
7S/05W-15C01 M	80.0	3-19-63	11.5	68.5	5050
7S/05W-15E01 M	75.2	3-19-63	3.3	71.9	5050
7S/05W-15E02 M	30.0	7-18-62	12.6	17.4	5050
		8-17-62	13.6	16.4	
		9-18-62	13.6	16.4	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
SAN GREGORIO VALLEY			2-24.00		
7S/05W-15E02 M CONT.	30.0	10-18-62	10.7	19.3	5050
		11-21-62	11.9	18.1	
		12-21-62	11.5	18.5	
		1-23-63	12.0	18.0	
		2-20-63	10.6	19.4	
		3-19-63	12.5	17.5	
		4-24-63	11.0	19.0	
		5-23-63	12.7	17.3	
		6-19-63	13.6	16.4	
7S/05W-15H02 M	40.0	3-19-63	15.4	24.6	5050
PESCADERO VALLEY			2-26.00		
8S/05W-09H01 M	20.0	7-18-62	4.9	15.1	5050
		8-17-62	5.4	14.6	
		9-18-62	5.6	14.4	
		10-18-62	4.1	15.9	
		11-21-62	4.9	15.1	
		12-21-62	3.5	16.5	
		1-23-63	5.0	15.0	
		2-23-63	4.0	16.0	
		3-19-63	4.3	15.7	
		4-24-63	3.9	16.1	
		5-23-63	4.6	15.4	
		6-19-63	4.7	15.3	
8S/05W-11M01 M	45.0	3-19-63	13.1	31.9	5050

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
SOQUEL VALLEY			3-01.00		
11S/01W-09L01 M	124.2	7-18-62	58.4	65.8	5050
		8-17-62	59.0	65.2	
		9-18-62	58.8	65.4	
		10-18-62	59.7	64.5	
		11-20-62	58.5	65.7	
		12-20-62	60.9	63.3	
		1-22-63	59.4	64.8	
		2-19-63	59.0	65.2	
		3-19-63	60.2	64.0	
		4-23-63	60.5	63.7	
		5-22-63	58.4	65.8	
		6-19-63	57.4	66.8	
11S/01W-15H01 M	91.7	6-19-63	60.3*	31.4	5050
PAJARO VALLEY			3-02.00		
12S/01E-24G01 M	9.4	7-18-62	19.8	- 10.4	5050
		8-16-62	□		
		9-18-62	14.6	- 5.2	
		10-18-62	8.9	0.5	
		11-20-62	8.3	1.1	
		12-20-62	6.1	3.3	
		1-22-63	5.9	3.5	
		2-19-63	4.5	4.9	
		3-19-63	5.0	4.4	
		4-23-63	3.5	5.9	
		5-21-63	13.0	- 3.6	
		6-18-63	13.8	- 4.4	
12S/02E-16J01 M	20.5	7-18-62	□		5050
		8-16-62	30.5	- 10.0	
		9-18-62	23.0	- 2.5	
		10-18-62	17.4	3.1	
		11-20-62	15.7	4.8	
		12-20-62	14.0	6.5	
		1-22-63	14.3	6.2	
		2-19-63	13.1	7.4	
		3-19-63	12.2	8.3	
		4-23-63	10.3	10.2	
		5-21-63	22.2	- 1.7	
		6-18-63	23.3	- 2.8	
12S/02E-31K01 M	30.0	7-18-62	□		5050
		8-16-62	□		

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
PAJARO VALLEY			3-02.00		
12S/02E-31K01 M CONT.	30.0	9-18-62	31.0	- 1.0	5050
		10-18-62	30.2	- 0.2	
		11-20-62	32.1	- 2.1	
		12-12-62	28.9	1.1	5100
		12-20-62	29.5	0.5	5050
		1-22-63	52.3*	- 22.3	
		2-19-63	26.6	3.4	
		3-19-63	26.0	4.0	
		4-08-63	24.9	5.1	5100
		4-23-63	24.8	5.2	5050
		5-21-63	46.3*	- 16.3	
		6-18-63	27.5	2.5	
13S/02E-05B01 M	136.0	7-18-62	138.5	- 2.5	5050
		8-16-62	139.7	- 3.7	
		9-18-62	140.7	- 4.7	
		10-18-62	140.5	- 4.5	
		11-20-62	139.3	- 3.3	
		12-20-62	138.4	- 2.4	
		1-22-63	137.3	- 1.3	
		2-19-63	136.2	- 0.2	
		3-19-63	137.9	- 1.9	
		4-23-63	134.4	1.6	
		5-21-63	143.8*	- 7.8	
		6-18-63	135.6	0.4	
GILROY-HOLLISTER VALLEY			3-03.00		
SOUTH SANTA CLARA COUNTY			3-03.01		
9S/03E-27C02 M	347.0	7-16-62	120.7*	226.3	2400
		8-10-62	113.9	233.1	
		9-28-62	116.0	231.0	
		10-09-62	118.4	228.6	
		11-13-62	115.6	231.4	
		12-10-62	111.0	236.0	
		1-09-63	111.7	235.3	
		2-11-63	108.6	238.4	
		3-12-63	101.4	245.6	
		4-10-63	91.8	255.2	
		5-13-63	82.9	264.1	
		6-10-63	□		
9S/03E-29B01 M	397.6	4-03-63	8.1	389.5	5050
10S/03E-34L01 M	249.3	7-17-62	7.5	241.8	5050

TABLE C-2

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
SOUTH SANTA CLARA COUNTY			3-03.01		
10S/03E-34L01 M CONT.	249.3	8-16-62	8.9	240.4	5050
		9-19-62	14.2	235.1	
		10-17-62	11.9	237.4	
		11-19-62	8.4	240.9	
		12-19-62	□		
		1-23-63	10.3	239.0	
		2-18-63	6.7	242.6	
		3-20-63	5.8	243.5	
		4-03-63	7.2	242.1	
		4-23-63	6.4	242.9	
		5-20-63	8.0	241.3	
		6-18-63	8.0	241.3	
10S/04E-18G02 M	259.5	7-17-62	101.4	158.1	5050
		8-16-62	98.6	160.9	
		9-09-62	□		
		10-17-62	104.8	154.7	
		11-19-62	88.3	171.2	
		12-19-62	82.9	176.6	
		1-21-63	86.7	172.8	
		2-18-63	76.5	183.0	
		3-20-63	71.4	188.1	
		4-03-63	64.5	195.0	
		4-23-63	54.2	205.3	
		5-20-63	50.3	209.2	
		6-18-63	63.0	196.5	
10S/04E-35E01 M	248.0	4-03-63	81.7	166.3	5050
11S/03E-01B01 M	227.0	4-00-63	54.7	172.3	5400
SAN BENITO COUNTY			3-03.02		
11S/05E-13D01 M	255.7	7-17-62	25.2	230.5	5050
		8-16-62	27.8	227.9	
		9-19-62	25.1	230.6	
		10-17-62	28.5	227.2	
		11-19-62	28.9	226.8	
		12-20-62	□		
		1-21-63	31.1	224.6	
		2-18-63	24.0	231.7	
		3-20-63	23.4	232.3	
		4-00-63	22.2	233.5	5101
		4-23-63	20.0	235.7	5050
		5-21-63	23.8	231.9	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
SAN BENITO COUNTY			3-03.02		
11S/05E-13D01 M CONT.	255.7	6-18-63	□		5050
12S/04E-20C01 M	152.9	3-00-63	27.2	125.7	5101
12S/05E-12F01 M	216.3	7-17-62	95.2*	121.1	5050
		8-16-62	88.3	128.0	
		9-19-62	76.9	139.4	
		10-17-62	91.5*	124.8	
		11-19-62	88.9	127.4	
		12-20-62	78.9	137.4	
		1-21-63	80.6	135.7	
		2-18-63	78.4	137.9	
		3-00-63	77.0	139.3	5101
		3-20-63	78.2	138.1	5050
		4-23-63	□		
		6-18-63	@		
12S/05E-33A01 M	280.0	7-17-62	90.1	189.9	5050
		8-16-62	91.4	188.6	
		9-19-62	87.5	192.5	
		10-18-62	88.5	191.5	
		11-19-62	99.9*	180.1	
		12-20-62	88.2	191.8	
		1-21-63	101.9*	178.1	
		2-18-63	95.2	184.8	
		3-20-63	93.2	186.8	
		4-23-63	81.5	198.5	
		5-21-63	94.7	185.3	
		6-18-63	□		
13S/05E-11Q01 M	325.5	3-00-63	54.0	271.5	5101
SALINAS VALLEY			3-04.00		
PRESSURE AREA 180 FOOT AQUIFER			3-04.01		
14S/02E-03C01 M	10.6	12-07-62	17.6	- 7.0	2100
		3-22-63	10.1	0.5	
14S/02E-15L01 M	23.0	12-05-62	24.5	- 1.5	2100
		3-19-63	18.0	5.0	
15S/02E-01Q01 M	42.0	7-18-62	□		2100
		8-15-62	□		

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
PRESSURE AREA 180 FOOT AQUIFER			3-04.01		
15S/02E-01Q01 M	42.0	10-19-62	49.7	- 7.7	2100
CONT.		11-20-62	43.7	- 1.7	
		12-03-62	39.1	2.9	
		1-18-63	34.9	7.1	
		2-19-63	28.7	13.3	
		3-18-63	30.7	11.3	
		4-16-63	□		
		5-14-63	□		
		6-14-63	□		
15S/03E-16M01 M	58.0	12-24-62	41.0	17.0	2100
		3-21-63	37.5	20.5	
15S/04E-33A01 M	125.0	12-07-62	89.7	35.3	2100
		3-19-63	86.8	38.2	
16S/04E-11D01 M	110.0	12-06-62	56.2	53.8	2100
		3-21-63	51.0	59.0	
PRESSURE AREA 400 FOOT AQUIFER			3-04.01		
13S/02E-31Q01 M	11.0	12-06-62	20.2	- 9.2	2100
		3-21-63	7.2	3.8	
14S/03E-18J01 M	69.0	7-19-62	96.3	- 27.3	2100
		8-15-62	□		
		9-18-62	91.5	- 22.5	
		10-22-62	80.5	- 11.5	
		11-20-62	76.8	- 7.8	
		12-10-62	71.9	- 2.9	
		1-18-63	67.3	1.7	
		2-19-63	63.6	5.4	
		3-18-63	65.1	3.9	
		4-16-63	60.6	8.4	
		5-14-63	68.0	1.0	
		6-14-63	93.0	- 24.0	
EAST SIDE AREA			3-04.02		
16S/05E-17R01 M	181.0	12-14-62	113.3	67.7	2100
		3-22-63	109.0	72.0	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
FOREBAY AREA			3-04.03		
17S/05E-11C01 M	172.0	7-17-62	62.2	109.8	2100
		8-14-62	62.3	109.7	
		9-17-62	61.4	110.6	
		10-18-62	59.7	112.3	
		11-19-62	58.2	113.8	
		12-14-62	56.7	115.3	
		1-17-63	56.3	115.7	
		2-18-63	53.3	118.7	
		3-25-63	□		
		4-17-63	□		
		5-14-63	□		
		6-13-63	#		
ARROYO SECO CONE			3-04.04		
18S/06E-15M01 M	277.0	12-12-62	97.3	179.7	2100
		3-21-63	84.9	192.1	
19S/06E-11C01 M	373.0	7-17-62	□		2100
		8-13-62	□		
		9-17-62	195.0	178.0	
		10-18-62	193.2	179.8	
		11-19-62	186.0	187.0	
		12-17-62	173.2	199.8	
		1-17-63	168.0	205.0	
		2-18-63	161.5	211.5	
		3-20-63	153.2	219.8	
		4-17-63	147.0	226.0	
		5-15-63	146.0	227.0	
		6-13-63	□		
UPPER VALLEY AREA			3-04.05		
19S/07E-10P01 M	315.0	7-16-62	□		2100
		8-16-62	□		
		9-17-62	86.8	228.2	
		10-18-62	84.5	230.5	
		11-15-62	84.1	230.9	
		12-18-62	82.2	232.8	
		1-17-63	84.3	230.7	
		2-18-63	83.7	231.3	
		3-20-63	81.9	233.1	
		4-17-63	81.5	233.5	
		5-15-63	□		
		6-13-63	□		

TABLE C-2

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
UPPER VALLEY AREA			3-04.05		
20S/08E-05R01 M	337.0	12-18-62	64.2	272.8	2100
		3-19-63	□		
21S/09E-06K01 M	344.0	12-03-62	12.3	331.7	2100
		3-19-63	□		
21S/10E-32N01 M	400.0	12-03-62	21.2	378.8	2100
		3-18-63	19.2	380.8	
22S/10E-16K01 M	472.0	12-04-62	74.1	397.9	2100
		3-18-63	70.2	401.8	
PASO ROBLES			3-04.06		
24S/10E-11C01 M	618.0	4-12-63	50.5	567.5	5100
24S/11E-25N01 M	603.0	4-12-63	37.1	565.9	5100
24S/11E-33R01 M	564.0	4-12-63	19.1	544.9	5100
24S/11E-35J01 M	616.8	4-12-63	69.0	547.8	5100
24S/12E-17N01 M	769.5	4-12-63	14.9	754.6	5100
24S/15E-33C01 M	1225.0	4-15-63	29.6	1195.4	5100
25S/11E-35G01 M	879.8	4-12-63	40.5	839.3	5100
25S/12E-17J01 M	639.0	4-12-63	44.4	594.6	5100
25S/12E-17R01 M	639.0	4-12-63	46.6	592.4	5100
25S/12E-26K01 M	747.5	4-15-63	109.0	638.5	5100
25S/13E-11E01 M	1184.0	4-09-62	39.1	1144.9	5100
		4-15-63	39.1	1144.9	
25S/16E-17L01 M	1164.5	4-09-62	29.5	1135.0	5100
		4-15-63	27.8	1136.7	
25S/16E-30M01 M	1218.0	4-09-62	72.8	1145.2	5100
		4-15-63	75.3	1142.7	
26S/12E-04N01 M	674.5	4-09-62	43.5	631.0	5100
		4-12-63	44.5	630.0	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
PASO ROBLES			3-04.06		
26S/12E-26E01 M	839.0	4-11-62	190.2	648.8	5100
		4-12-63	195.7	643.3	
26S/12E-35M01 M	818.0	4-10-62	135.9	682.1	5100
		4-12-63	144.4	673.6	
26S/13E-10D01 M	799.0	4-09-62	8.1	790.9	5100
		4-15-63	8.6	790.4	
26S/13E-34B01 M	1005.0	4-12-63	153.7	851.3	5100
26S/14E-16L01 M	1018.0	4-09-62	55.6	962.4	5100
		4-15-63	63.9	954.1	
26S/14E-35D01 M	1134.5	4-11-62	114.9	1019.6	5100
		4-15-63	79.2	1055.3	
26S/15E-02B01 M	1114.0	4-09-62	29.9	1084.1	5100
		4-15-63	28.0	1086.0	
26S/15E-28Q02 M	1111.4	4-11-62	49.1	1062.3	5100
		4-16-63	60.7	1050.7	
26S/15E-29N01 M	1134.4	4-11-62	77.4	1057.0	5100
		4-15-63	76.4	1058.0	
27S/12E-21N01 M	747.5	4-10-62	7.2	740.3	5100
		4-12-63	5.9	741.6	
27S/13E-24N01 M	1030.0	4-10-62	17.5	1012.5	5100
		4-12-63	8.0	1022.0	
27S/13E-32B01 M	1103.5	4-10-62	48.5	1055.0	5100
		4-12-63	51.3	1052.2	
27S/15E-10R02 M	1130.0	4-11-62	45.7	1084.3	5100
		4-16-63	57.7	1072.3	
27S/15E-13A01 M	1155..	4-10-62	11.2	1142.3	5100
		4-16-63	23.3	1130.2	
27S/16E-21E02 M	1253.0	4-10-62	55.8	1197.2	5100
		4-16-63	57.9	1195.1	
28S/12E-10G01 M	825.0	4-10-62	- 1.2	825.2	5100

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
PASO ROBLES			3-04.06		
28S/12E-10G01 M	825.0	4-12-63	7.7	816.3	5100
28S/12E-10R02 M	805.0	4-09-62	9.2	795.8	5100
		4-10-63	8.9	796.1	
28S/12E-13N01 M	850.3	4-11-62	6.1	844.2	5100
		4-16-63	7.9	842.4	
28S/12E-14G01 M	824.6	4-11-62	7.4	817.2	5100
		4-16-63 -	1.3	825.9	
28S/13E-04K01 M	1199.5	4-10-62	62.2	1137.3	5100
		4-12-63	65.3	1134.2	
28S/13E-04K02 M	1195.0	4-10-62	69.0	1126.0	5100
		4-12-63	77.4	1117.6	
28S/14E-07E01 M	1150.0	4-10-62	10.0	1140.0	5100
		4-12-63	11.0	1139.0	
28S/16E-23M01 M	1439.0	4-10-62	39.6	1399.4	5100
		4-16-63	41.9	1397.1	
29S/13E-05F03 M	915.6	4-11-62	12.1	903.5	5100
		4-16-63	14.0	901.6	
29S/13E-05K02 M	928.5	4-11-62	6.7	921.8	5100
		4-16-63	10.0	918.5	
29S/13E-06A01 M	920.0	4-11-62	38.3	881.7	5100
		4-16-63	39.1	880.9	
29S/13E-19H01 M	1002.5	4-10-62	8.1	994.4	5100
		4-16-63	7.9	994.6	
CARMEL VALLEY			3-07.00		
16S/01E-25B01 M	140.0	7-20-62	15.3	124.7	5050
		8-14-62	15.4	124.6	
		9-18-62	□		
		10-16-62	15.1	124.9	
		11-16-62	16.2	123.8	
		12-07-62	16.4	123.6	
		1-18-63	16.0	124.0	5100
		2-19-63	13.0	127.0	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
CARMEL VALLEY			3-07.00		
16S/01E-25B01 M	140.0	3-00-63	□		5100
CONT.		4-16-63	13.0	127.0	
		5-21-63	13.8	126.2	
		6-17-63	14.7	125.3	
WEST SANTA CRUZ TERRACE			3-26.00		
11S/02W-22K01 M	30.0	11-29-62	69.7 -	39.7	5050

APPENDIX D

SURFACE WATER QUALITY

TABLE OF CONTENTS

SURFACE WATER QUALITY

This appendix contains data pertaining to the quality of surface waters in the Central Coastal Area. The data presented are the observed physical, chemical, bacteriological, and radiological characteristics of surface waters sampled during the 1963 water year, which covers the period from October 1, 1962 through September 30, 1963.

Laboratory Methods and Procedures

Methods of mineral and bacterial analysis, in general, are those described in the American Public Health Association publication, "Standard Methods for the Examination of Water and Sewage", 11th Edition, 1960. In some cases, the methods described in U. S. Geological Survey, "Methods for Collection and Analysis of Water Samples", Water Supply Paper 1454, 1960, have been employed.

Types of analyses normally made of surface water samples collected by the Department are mineral, bacterial, radiological, and trace element.

Sampling Station Data and Index

Table D-1, "Sampling Station Data and Index", is an alphabetic listing of stations from which surface water samples were collected. The analyses of these samples are reported in subsequent tables. The station number is an arbitrary number that has been assigned to each station. The location pertains to either the township, range, and section of the Public Land Survey or to latitude and longitude. The stations are classified into monitoring, investigational, and operational types.

Analyses of Surface Water

Table D-2, "Analyses of Surface Water", includes physical characteristics of the water and the results of mineral and bacterial analyses. The data are presented by region and by stream from north to south within a region. At the time the samples were collected for laboratory examination, field determinations were made for dissolved oxygen (DO) by the modified Winkler method, water temperature, and pH. Visual inspections were made of the streams and the physical conditions were noted. Field measurements of DO and temperature are reported in Table D-2.

Samples collected for bacterial examination were mailed or delivered to the laboratory. Every effort was made to get the samples to the laboratory as quickly as possible. Results of bacterial determinations presented in this appendix should be considered as qualitative. Undue weight should not be given to the values for quantitative purposes.

Data from operational stations are shown separately at the end of the table. These data consist of analyses of South Bay Aqueduct water.

Summary of Coliform Analyses

Coliform data included in Table D-2 are made more usable by summarizing the results of the analyses of the 24 samples collected at each station during the year. Table D-3 is a summary of these analyses.

Spectrographic Analyses of Surface Water

Spectrographic analyses were made to determine the concentration of 17 different metals in surface water samples. Most of these metals are present in very small amounts and are often called trace metals. The concentrations indicated in Table D-4 are in parts per billion instead of parts per million

which is commonly used in reference to concentrations of mineral constituents. The symbols included with the constituent quantities are:

< Less than the amount indicated.

≦ Equal to or slightly less than the amount indicated.

Radioassays of Surface Water

Table D-5, "Radioassays of Surface Water", presents the radioactivity of surface water samples collected at 24 monitoring stations. The samples were collected in May and September at the same time that samples were collected for standard mineral analyses shown on Table D-2. The methods and procedures of sample preparation and determination of radioactivity in surface water are described in "Standard Methods for the Examination of Water and Sewage, 11th Edition".

Results are expressed as pico curies per liter (pc/l). The term pico curies is also written micro-micro curies and is further defined as 10^{-12} curies. Four values are reported for each sample: (a) beta activity in the solids retained on the filter (suspended material), (b) beta activity in the filtrate (dissolved material), (c) alpha activity in the solids, and (d) alpha activity in the filtrate. Sample counts are corrected for background and geometric efficiency. Standard statistical procedures are utilized to compute the 0.9 error. The final result is expressed (symbolically) as $x \pm y$ pc/l. This means that in a series of determinations on the same sample, the value of x should fall between $x - y$ and $x + y$ 90 percent of the time.

Salinity Observations at Bay and Delta Stations

Table D-6 describes the ten stations for which salinity data are listed in Table D-7 and includes maximum observed salinity at bay and delta stations.

Table D-7 presents chloride concentrations of samples collected at ten stations between Sobrante Beach and Collinsville for the period October 1, 1962 through June 30, 1963. From July 1, 1963 through September 30, 1963, samples were collected from only six of the stations.

Electrical Conductance

Data from two electrical conductivity recorders are present in Figures D-1 and D-2. These data are machine prepared graphs. Daily mean values are plotted in Figure D-1 and single daily reading at 1300 hours are plotted in Figure D-2. Each figure or graph presents the data from a station. The beginning of the continuous conductivity record occurred during 1963 and is indicated by the beginning of the graph on each figure.

TABLE D-1

SAMPLING STATION DATA AND INDEX

Station	Station Number	Location[a]	Beginning of Record	Station[c] Type	Sampled[d] by	Analysis on page
ALAMEDA CREEK NEAR NILES	73	4S/1W-15	Dec., 1951	M	DWR	D-23
ALAMEDA CREEK NEAR NILES	73	4S/1W-15	Dec., 1959	M	USGS	D-20
ALISAL CREEK ON OLD STAGE ROAD NEAR SALINAS	200	14S/4E-30	e	M	MCFCWCD	D-40
ALTAMONT CREEK AT ALTAMONT TURNOUT OF SOUTH BAY AQUEDUCT	201	2S/3E-31	June, 1962	O	DWR	D-27
ARROYO DE LA LAGUNA AT VERONA	202	3S/1E-29	Dec., 1959	M	USGS	D-23
ARROYO DEL VALLE NEAR LIVERMORE	71	4S/2E-4	July, 1958	M	DWR	D-26
ARROYO SECO RIVER NEAR SOLEDAD	203	19S/6E-16	e	M	MCFCWCD	D-42
BEAN CREEK ONE MILE EAST OF FELTON	204	10S/2W-22	Aug., 1963	I	DWR	D-32
BEAR CREEK AT BOULDER CREEK	205	9S/2W-30	Aug , 1963	I	DWR	D-34
BEAR CREEK FOUR MILES NORTHEAST OF BOULDER CREEK	206	9S/2W-10	Aug , 1963	I	DWR	D-34
BENICIA	235	38°02' Lat[b] 122°09' Long	1944	M	DWR	D-57
BETHANY FOREBAY AT SOUTH BAY PUMPING PLANT	207	2S/3E-10	April, 1962	O	DWR	D-48
BIG RIVER NEAR MOUTH	8c	17N/17W-24	Jan., 1959	M	DWR	D-12
BOULDER CREEK AT BOULDER CREEK	208	9S/2W-30	Aug., 1963	I	DWR	D-34
BRANCIFORTE CREEK NEAR SANTA CRUZ	209	11S/1W-7	Aug , 1963	I	DWR	D-31
CARMEL RIVER AT ROBLES DEL RIO	83	17S/2E-2	Jan., 1952	M	DWR	D-47
CLEAR CREEK AT BROOKDALE	210	9S/2W-32	Aug., 1963	I	DWR	D-34
COLLINSVILLE	236	38°04' Lat[b] 121°51' Long	1924	M	DWR	D-57
COYOTE CREEK NEAR MADRONE	82	9S/3E-9	Jan., 1952	M	DWR	D-29
CROCKETT	237	38°03' Lat[b] 122°13' Long	1946	M	DWR	D-57
FALL CREEK ONE-HALF MILE NORTH OF FELTON	211	10S/2W-16	Aug., 1963	I	DWR	D-33
GABILAN CREEK ON OLD STAGE ROAD NEAR SALINAS	212	13S/3E-35	e	M	MCFCWCD	D-39
GUALALA RIVER, SOUTH FORK, NEAR ANNAPOLIS	9a	10N/14W	Jan., 1959	M	DWR	D-14
INNISFAIL FERRY	238	38°11' Lat[b] 121°58' Long	1929	M	DWR	D-57
KINGS CREEK TWO MILES NORTH OF BOULDER CREEK	213	9S/2W-18	Aug , 1963	I	DWR	D-35
LIVERMORE CANAL AT PATTERSON RESERVOIR	214	3S/3E-6	Aug., 1962	O	DWR	D-50
LOMPICO CREEK ONE MILE NORTH OF OLYMPIA	215	10S/2W-11	Aug., 1963	I	DWR	D-33
LOS GATOS CREEK NEAR LOS GATOS	74	8S/1W-29	Dec., 1951	M	DWR	D-28
LOVE CREEK AT BEN LOMOND	216	10S/2W-4	Aug., 1963	I	DWR	D-34
MARTINEZ	239	38°02' Lat[b] 122°08' Long	1926	M	DWR	D-57
NACIMIENTO LAKE AT DAM NEAR SAN MIGUEL	217	25S/10E-15	e	M	MCFCWCD	D-46
NACIMIENTO RIVER NEAR SAN MIGUEL	43b	25S/11E-4	July, 1958	M	DWR	D-45
NAPA RIVER NEAR ST. HELENA	72	8N/5W-33	Dec., 1951	M	DWR	D-19
NATIVIDAD CREEK ON OLD STAGE ROAD NEAR SALINAS	218	14S/3E-12	e	M	MCFCWCD	D-40
NAVARRO RIVER NEAR NAVARRO	8b	15N/16W-7	Jan., 1959	M	DWR	D-13
NEWELL CREEK ONE MILE NORTHEAST OF BEN LOMOND	219	10S/2W-3	Aug., 1963	I	DWR	D-33
NOYO RIVER NEAR FORT BRAGG	10c	18N/17W-10	Jan., 1959	M	DWR	D-11

a Locations are referenced to Mt. Diablo Base and Meridian.
b Locations given in latitude and longitude because the areas have not been surveyed for township, range, and section.
c M-Monitoring, I-Investigational, O-Operational.
d DWR-Department of Water Resources, USGS-United States Geological Survey, MCFWCD-Monterey County Flood Control and Water Conservation District.

e Beginning of record prior to 1950.

TABLE D-1

SAMPLING STATION DATA AND INDEX

Station	Station Number	Location[a]	Beginning of Record	Station[c] Type	Sampled[d] by	Analysis on page
PAJARO RIVER NEAR CHITTENDEN	77	12S/3E-12	Dec., 1951	M	DWR	D-36
PANCHO RICO CREEK NEAR SAN ARDO	220	22S/10E-16	e	M	MCFCWCD	D-42
PITTSBURG	240	38°02' Lat[b] 121°53' Long	1945	M	DWR	D-57
PORT CHICAGO	241	38°04' Lat[b] 122°02' Long	1946	M	DWR	D-57
RUSSIAN RIVER, EAST FORK, AT POTTER VALLEY POWERHOUSE	1Da	17N/11W-6	May, 1951	M	DWR	D-18
RUSSIAN RIVER AT GUERNEVILLE	10	8N/10W-32	April, 1951	M	DWR	D-15
RUSSIAN RIVER NEAR HEALDSBURG	9	9N/9W-22	April, 1951	M	DWR	D-16
RUSSIAN RIVER NEAR HOPLAND	8a	14N/12W-36	April, 1951	M	DWR	D-17
SALINAS RIVER NEAR BRADLEY	43c	23S/10E-15	July, 1958	M	DWR	D-42
SALINAS RIVER AT CHUALAR BRIDGE NEAR CHUALAR	221	16S/4E-8	e	M	MCFCWCD	D-41
SALINAS RIVER AT HILLTOWN BRIDGE NEAR SPRECKELS	222	15S/3E-18	e	M	MCFCWCD	D-41
SALINAS RIVER AT PASO ROBLES	43a	26S/12E-28	April, 1951	M	DWR	D-46
SALINAS RIVER AT SAN ARDO BRIDGE NEAR SAN ARDO	223	22S/10E-17	e	M	MCFCWCD	D-42
SALINAS RIVER AT SAN LUCAS BRIDGE NEAR SAN LUCAS	224	21S/9E-8	e	M	MCFCWCD	D-42
SALINAS RIVER NEAR SPRECKELS	43	15S/3E-18	April, 1951	M	DWR	D-40
SAN ANTONIO RIVER AT PLEYTO BRIDGE NEAR PLEYTO	225	24S/9E-3	e	M	MCFCWCD	D-43
SAN ANTONIO RIVER NEAR PLEYTO	43d	24S/9E-3	July, 1958	M	DWR	D-44
SAN BENITO RIVER NEAR BEAR VALLEY FIRE STATION	77a	15S/7E-28	July, 1958	M	DWR	D-37
SAN LORENZO RIVER AT BIG TREES	226	10S/2W-27	Aug., 1963	I	DWR	D-31
SAN LORENZO RIVER AT BIG TREES NEAR FELTON	75	10S/2W-27	Dec , 1951	M	DWR	D-31
SAN LORENZO RIVER AT BOULDER CREEK	227	9S/2W-30	Aug , 1963	I	DWR	D-35
SAN LORENZO RIVER SIX MILES NORTH OF BOULDER CREEK	228	8S/3W-25	Aug., 1963	I	DWR	D-35
SAN LORENZO RIVER AT FELTON	229	10S/2W-22	Aug., 1963	I	DWR	D-33
SAN LORENZO RIVER AT SANTA CRUZ	230	11S/2W-12	Aug., 1963	I	DWR	D-31
SOBRANTE BEACH	242	38°00' Lat[b] 122° 20' Long	1961	M	DWR	D-57
SOQUEL CREEK AT SOQUEL	76	11S/1W-10	Dec., 1951	M	DWR	D-35
SPOONBILL CREEK	243	38°04' Lat[b] 121°54' Long	1957	M	DWR	D-57
TORO CREEK AT HIGHWAY 117 BRIDGE NEAR SALINAS	231	15S/2E-35	e	M	MCFCWCD	D-40
TWO BAR CREEK ONE MILE NORTH OF BOULDER CREEK	232	9S/2W-19	Aug., 1963	I	DWR	D-35
UVAS CREEK NEAR MORGAN HILL	96	10S/3E-17	July, 1952	M	DWR	D-38
WEST SUISUN	244	38°05' Lat[b] 122°06' Long	1946	M	DWR	D-57
ZAYANTE CREEK AT FELTON	233	10S/2W-22	Aug , 1963	I	DWR	D-32
ZAYANTE CREEK AT ZAYANTE	234	10S/2W-2	Aug , 1963	I	DWR	D-33

a Locations are referenced to Mt Diablo Base and Meridian
b Locations given in latitude and longitude because the areas have not been surveyed for township, range, and section.
c M-Monitoring, I-Investigational, O-Operational.
d DWR-Department of Water Resources, USGS-United States Geological Survey, MCFWCD-Monterey County Flood Control and Water Conservation District.
e Beginning of record prior to 1951

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfates (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N C ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
											NOYO RIVER NEAR FORT BRAGG (STA. 10c)																
10-9-62 1550	51	60	9.0	90	168	7.3 / 7.9		1.26[c]	12 / 0.52		0 / 0.00	87 / 1.43		9.7 / 0.27			0.1			112[e]	29	63	0	5	13 / 2 1	USGS
11-14-62 1330	24	50	11.1	98	170	7.3 / 7.9		1.20[c]	10 / 0.44		0 / 0.00	88 / 1.44		7.5 / 0.21			0.2			113[e]	27	60	0	2	50. / 23.	
12-11-62 1345	125	49	11.9	103	134	7.2 / 8.0		0.99[c]	8.5 / 0.37		0 / 0.00	69 / 1 13		6.2 / 0.17			0.1			89[e]	27	50	0	6	62 / 13.	
1-3-63 1200	72	48	10.8	93	142	7.3 / 7.7		1.04[c]	8.6 / 0.37		0 / 0.00	74 / 1.21		7.4 / 0.21			0.0			95[e]	26	52	0	5	2.3 / 0.23	
2-12-63 1220	280	55	10.5	99	116	7.2 / 7.5		0.80[c]	8.1 / 0.35		0 / 0.00	56 / 0.92		6.0 / 0.17			0.0			77[e]	30	40	0	20	62. / 62.	
3-12-63 1255	63	52	11.5	104	143	7.3 / 7.6		1.06[c]	7.8 / 0.34		0 / 0.00	72 / 1.18		8.6 / 0.24			0.0			95[e]	24	53	0	2	62 / 6 2	
4-10-63 1400	1,600	52	10.5	95	89	7.6 / 7.5		0.61[c]	5.2 / 0.23		0 / 0.00	41 / 0.67		6.0 / 0.17			0.0			59[e]	27	31	0	35	21. / 62.	
5-7-63 1030	122	56	10.4	99	128	7.2 / 7.6	12 / 0.60	4.1 / 0.34	7.6 / 0.33	1 1 / 0.03	0 / 0.00	64 / 1.05	5.0 / 0.10	5.8 / 0.16	0.6 / 0.01	0.3 / 0.02	0.0	20	PO_4=0.05	79[g]	25	47	0	4	230. / 6 2	
6-13-63 0815	36	60	9.6	96	153	7. / 8 2		1.10[c]	9.3 / 0.40		0 / 0.00	80 / 1.31		7.4 / 0.21			0.1			102[e]	27	55	0	3	23. / 23.	
7-10-63 1000	20	66	9.0	96	160	7.2 / 8.2		1.30[c]	11 / 0.48		0 / 0.00	81 / 1.33		8.6 / 0.24			0.1			107[e]	27	65	0	5	2 3	
8-7-63 1440	12	68	9.7	106	165	7. / 8.1		1.19[c]	10 / 0.44		0 / 0.00	80 / 1.31		9.0 / 0.25			0.0			110[e]	27	59	0	1	5.0 / 2.3	
9-13-63 0900	5.7	66	8.9	95	170	6.9 / 8.0	16 / 0.80	5.1 / 0.42	10 / 0.44	0.8 / 0.02	0 / 0.00	83 / 1.36	5.0 / 0.10	9.2 / 0.26	0.4 / 0.01	0.1 / 0.01	0.0	18	Ae = 0.01 ABS = 0.0 PO4 = 0.10	105[g]	26	61	0	2	2.3 / 2.3	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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TABLE D-2

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen % of Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonates (CO_3)	Bicarbonates (HCO_3)	Sulfates (SO_4)	Chlorides (Cl)	Nitrates (NO_3)	Fluorides (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: NC ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
							equivalents per million																			
BIG RIVER NEAR MOUTH (STA 8c)																										
10-9-62 1315	25 (est)	60	9.3	94	216	7.3 / 7.9		1.70[c]	13 / 0.57		0 / 0.00	122 / 2.00		9.6 / 0.27			0.3			138[e]	25	89	0	2		USGS
11-14-62 1215	20 (est)	51	10.5	95	222	7.4 / 7.8		1.76[c]	12 / 0.52		0 / 0.00	125 / 2.05		7.2 / 0.20			0.4			141[e]	23	88	0	4		
12-11-62 1210	380 (est)	49	10.6	93	165	7.3 / 8.0		1.31[c]	9.8 / 0.43		0 / 0.00	89 / 1.46		1.2 / 0.03			0.2			105[e]	25	65	0	35		
1-3-63 1100	130 (est)	47	10.7	91	182	7.3 / 7.9		1.43[c]	9.9 / 0.43		0 / 0.00	96 / 1.57		10 / 0.28			0.1			116[e]	23	71	0	10		
2-12-63 1110	600 (est)	52	10.6	97	144	7.2 / 7.5		1.10[c]	8.4 / 0.37		0 / 0.00	74 / 1.21		4.8 / 0.14			0.0			92[e]	25	55	0	25		
3-12-63 1125	120 (est)	50	11.2	99	175	7.2 / 7.6		1.34[c]	9.0 / 0.39		0 / 0.00	89 / 1.46		7.0 / 0.20			0.1			111[e]	23	67	0	1		
4-10-63 1300	400 (est)	53	11.2	104	102	7.7		0.80[c]	5.5 / 0.24		0 / 0.00	53 / 0.87		4.8 / 0.14			0.0			65[e]	23	40	0	60		
5-7-63 1025	170 (est)	58	9.8	97	166	7.3 / 7.7	16 / 0.80	6.1 / 0.50	8.5 / 0.37	1.5 / 0.04	0 / 0.00	87 / 1.43	7.0 / 0.15	5.8 / 0.16	0.7 / 0.01	0.2 / 0.01	0.1	18	PO_4=0.10	101[f]	22	65	0	25		
6-12-63 1530	50 (est)	65	10.0	107	292	8. / 8.3		2.12[c]	17 / 0.74		2 / 0.07	122 / 2.00		19 / 0.54			0.5			186[e]	26	106	3	5		
7-10-63 1130	15 (est)	66	9.5	103	214	7.2 / 8.1		1.84[c]	12 / 0.52		0 / 0.00	118 / 1.93		8.0 / 0.23			0.4			136[e]	22	92	0	5		
8-7-63 1515	10 (est)	69	10.6	119	217	7. / 8.3		1.72[c]	12 / 0.52		1 / 0.03	119 / 1.95		9.5 / 0.27			0.1			138[e]	23	86	0	1		
9-13-63 1000	5 (est)	66	8.2	88.6	226	7.3 / 8.0	22 / 1.10	8.5 / 0.70	11 / 0.48	1.7 / 0.04	0 / 0.00	123 / 2.02	6.0 / 0.12	9.5 / 0.27	0.4 / 0.01	0.2 / 0.01	0.2	16	As = 0.01 ABS = 0.0 PO_4 = 0.05	127[f]	21	90	0	2		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

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NORTH COASTAL REGION (NO. 1)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million equivalents per million: Calcium (Co)	Magnesium (Mg)	Sodium (No)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chlorides (Cl)	Nitrate (NO_3)	Fluorides (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
NAVARRO RIVER NEAR NAVARRO (STA. #b)																										
10-9-62						7.3			14		0	152		12			0.1								2.3	USGS
1135	22	63	9.1	94	266	7.5		2.23[c]	0.61		0.00	2.49		0.34						162[e]	21	111	0	1	2.3	
11-14-62						7.7			13		0	154		9.0			0.5								6.2	
1100	50	53	10.0	92	275	8.0		2.36[c]	0.57		0.00	2.52		0.25						167[e]	19	118	0	2	0.23	
12-11-62						7.3			11		1	121		7.5			0.1								230.	
1045	165	49	10.8	94	227	8.4		1.88[c]	0.48		0.03	1 98		0.21						138[e]	20	94	0	6	0.62	
1-3-63						7.3			12		0	126		10			0.1								2.3	
0950	140	49	10.5	91	234	7.9		1.96[c]	0.52		0.00	2.07		0.28						142[e]	21	98	0	5	6.2	
2-12-63						7.4			8.8		0	84		5.0			0.0								23	
1000	1,050	54	10.2	95	164	7.7		1.30[c]	0.38		0.00	1.38		0.14						100[e]	23	65	0	70	62	
3-12-63						7.5			10		0	125		7.3			0.1								62.	
1020	205	52	10.8	98	232	7 8		1.92[c]	0.44		0.00	2.05		0.21						141[e]	19	96	0	2	6.2	
4-10-63						8.0			6.7		0	63		6.6			0.0								230.	
1200	2,830	53	10.8	99	125	7.7		0.99[c]	0.29		0.00	1.03		0 19						76[e]	23	50	0	190	230.	
5-7-63						7.4	20	8.0	9.6	1.6	0	111	7.0	6.0	1.0	0.4	0.1	17	PO_4 = 0.10						23.	
0820	363	60	9.6	96	203	7.8	1.00	0.66	0.42	0.04	0.00	1.82	0.15	0.17	0.02	0.02				122[g]	20	83	0	3	6.2	
6-13-63						8.			12		0	142		7.6			0.1								6.2	
1030	90	65	9.4	99	250	8 2		2.12[c]	0.52		0.00	2.33		0.21						152[e]	20	106	0	5	2.3	
7-10-63						7.7			13		4	139		9.4			0.2								2.1	
1200	45	71	10.5	118	259	8.4		2.34[c]	0.57		0.13	2.28		0.27						157[e]	20	117	0	7	2.1	
8-7-63						8.			13		0	148		10			0.0								2.3	
1630	18	71	10.0	112	268	7.7		2.24[c]	0.57		0.00	2.43		0.28						163[e]	20	112	0	1	.62	
9-13-63						7.4	27	11	13	1.8	0	148	10	9.5	0.4	0.1	0.1	18	As = 0.00						.62	
1100	13	70	8.9	99	268	7.8	1.35	0.90	0.57	0.05	0.00	2.43	0.21	0.27	0.01	0.01			ABS = 0.0 PO_4 = 0.05	154[g]	20	112	0	5	.62	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Annual median and range, respectively Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc (TTL), or California Department of Water Resources (DWR), as indicated.

TABLE D-2

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ NC ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
							equivalents per million																			
GUALALA RIVER, SOUTH FORK NEAR ANNAPOLIS (STA. 9a)																										
10-9-62 0915	9.1	62	6.1	62	280	7.2 / 8.0		2.37[c]	14 / 0.61		0 / 0.00	159 / 2.61		12 / 0.34			0.0			172[e]	20	118	0	2	6.2 62.	USGS
11-13-62 1440	35	56	10.1	96	270	7.6 / 8.0		2.28[c]	12 / 0.52		0 / 0.00	152 / 2.49		7.2 / 0.20			0.2			166[e]	19	114	0	2	0.62 62.	
12-10-62 1500	52	49	10.8	94	226	7.4 / 8.1		1.93[c]	10 / 0.44		0 / 0.00	124 / 2.03		6.6 / 0.19			0.0			139[e]	19	96	0	4	2.3 1.3	
1-2-63 1335	82	49	10.8	94	220	7.5 / 8.2		1.90[c]	9.9 / 0.43		0 / 0.00	119 / 1.95		7.6 / 0.21			0.0			135[e]	18	95	0	5	0.62 62.	
2-11-63 1610	1,050	56	9.4	89	159	7.2 / 7.4		1.32[c]	7.6 / 0.33		0 / 0.00	84 / 1.38		4.5 / 0.13			0.1		PO_4 = 0.15	97[e]	20	66	0	70	620. 230.	
3-11-63 1525	108	57	10.7	103	222	7.8 / 8.1		1.88[c]	9.3 / 0.40		0 / 0.00	121 / 1.98		7.4 / 0.21			0.0			136[e]	18	94	0	2	23. 2.3	
4-10-63 1000	1,940	56	10.4	99	144	7.8 / 7.8		1.18[c]	5.9 / 0.26		0 / 0.00	75 / 1.23		4.4 / 0.12			0.0			88[e]	18	59	0	50	130. 23.	
5-6-63 1540	248	63	9.9	102	207	7.1 / 7.9	20 / 1.00	9.5 / 0.78	8.8 / 0.38	1.4 / 0.04	0 / 0.00	115 / 1.88	11 / 0.23	5.0 / 0.14	0.7 / 0.01	0.2 / 0.01	0.0	18	PO_4 = 0.10	125[g]	17	89	0	3	6.2 0.7	
6-13-63 1130	52	64	11.5	120	246	8. / 8.0		2.08[c]	11 / 0.48		0 / 0.00	136 / 2.23		7.0 / 0.20			0.1			151[e]	19	104		4	6.2 62.	
7-10-63 1500	28	70	11.7	130	255	8.2 / 8.4		2.36[c]	12 / 0.52		2 / 0.07	144 / 2.36		7.9 / 0.22			0.1			156[e]	18	118	0	5	2.3 21.	
8-7-63 1915	17	63	8.1	83	261	8. / 7.7		2.20[c]	11 / 0.48		0 / 0.00	143 / 2.34		8.0 / 0.23			0.0			160[e]	18	110	0	1	23. 23.	
9-13-63 1330	7.7	72	10.5	119	268	7.8 / 8.1	27 / 1.35	11 / 0.91	12 / 0.52	1.9 / 0.05	0 / 0.00	148 / 2.43	10 / 0.21	9.8 / 0.28	0.8 / 0.01	0.1 / 0.01	0.0	17	As = 0.00 Pb = 0.00 PO_4 = 0.10	155[g]	18	113	0	1	2.3 2.3	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

3705-D-8 6-61 200 SPO

NORTH COASTAL REGION (NO. 1)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million equivalents per million											Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform MPN/ml	Analyzed by i
			ppm	%Sat			Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents			Total ppm	N.C. ppm		
RUSSIAN RIVER AT GUERNEVILLE (STA. 10)																								
10-8-62 1700	188	68	10.0	109	265	7.9 / 8.3		2.41[c]	10 / 0.44		3 / 0.10	150 / 2.46		9.0 / 0.25			0.3			157[e]	15	120	0	8	2.1 / 6.2	USGS
11-13-62 1230	481	64	10.6	110	269	7.7 / 8.0		2.36[c]	9.8 / 0.43		0 / 0.00	141 / 2.31		7.2 / 0.20			0.5			159[e]	15	118	2	3	23. / 2.3	
12-10-62 1210	730	54	9.4	87	258	7.3 / 8.1		2.31[c]	9.3 / 0.40		0 / 0.00	144 / 2.36		6.2 / 0.17			0.3			153[e]	15	116	0	20	2.3 / 2.3	
1-2-63 1335	690	52	10.0	90	291	7.4 / 8.0		2.62[c]	11 / 0.48		0 / 0.00	160 / 2.62		9.7 / 0.27			0.2			172[e]	15	131	0	20	62. / 23.	
2-11-63 1425	7,310	60	9.4	94	200	7.3 / 7.6		1.72[c]	7.8 / 0.34		0 / 0.00	108 / 1.77		4.8 / 0.14			0.1			118[e]	17	86	0	70	7,000. / 1,300.	
3-11-63 1345	945	60	11.5	115	284	7.8 / 8.0		2.57[c]	9.8 / 0.43		0 / 0.00	156 / 2.56		7.0 / 0.20			0.3			168[e]	14	129	1	9	23. / 23.	
4-9-63 1615	11,700	56	9.9	94	174	8.0 / 7.7		1.46[c]	5.5 / 0.24		0 / 0.00	86 / 1.41		3.5 / 0.10			0.0			103[e]	14	73	2	95	130. / 620.	
5-6-63 1250	2,130	63	9.9	102	245	7.4 / 8.1	23 / 1.15	13 / 1.09	8.0 / 0.35	1.2 / 0.03	0 / 0.00	137 / 2.25	13 / 0.27	4.2 / 0.12	1.9 / 0.03	0.3 / 0.02	0.1	17	PO_4 = 0.20 As = 0.00 ABS = 0.00	146[g]	13	112	0	30	13. / 6.2	
6-13-63 1230	440	70	9.8	109	302	7. / 8.4		2.76[c]	9.5 / 0.41		7 / 0.23	160 / 2.62		6.8 / 0.19			0.4			179[e]	13	138	0	5	6.2 / 13.	
7-11-63 1600	216	77	10.2	122	310	8.2 / 8.1		2.96[c]	11 / 0.48		0 / 0.00	178 / 2.92		6.0 / 0.17			0.4			184[e]	14	148	2	30	2.3 / 130.	
8-7-63 2100	142	71	10.1	114	304	7. / 8.1		2.85[c]	8.9 / 0.39		0 / 0.00	174 / 2.85		7.4 / 0.21			0.1			180[e]	12	143	0	4	2.3 / 6.2	
9-13-63 1515	216	72	8.1	92	275	7.6 / 8.4	27 / 1.35	14 / 1.17	9.3 / 0.40	1.2 / 0.03	5 / 0.17	150 / 2.46	11 / 0.23	4.8 / 0.14	0.8 / 0.01	0.2 / 0.01	0.3	16	As = 0.00 ABS = 0.0 PO_4 = 0.10	163[g]	14	126	0	30	2.3 / 6.2	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-2

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
RUSSIAN RIVER NEAR HEALDSBURG (STA. 9)																										
10-8-62 1440	189	70	9.7	108	242	7.8 / 8.0		2.25[c]	9.0 / 0.39		0 / 0.00	144 / 2.36		7.4 / 0.21			0.3			144[e]	15	112	0	3	62. 230.	USGS
11-15-62 1445	440	57	13.0	125	237	8.3 / 8.1		2.14[c]	8.1 / 0.35		0 / 0.00	136 / 2.23		4.8 / 0.14			0.5			141[e]	14	107	0	4	2. 2.1	
12-10-62 1055	388	52	9.8	89	252	7.5 / 8.1		2.32[c]	8.5 / 0.37		0 / 0.00	143 / 2.34		4.9 / 0.14			0.4			149[e]	14	116	0	20	23. 2.3	
1-2-63 1205	486	52	10.4	94	286	7.7 / 8.1		2.68[c]	9.2 / 0.40		0 / 0.00	161 / 2.64		8.0 / 0.23			0.3			170[e]	13	134	2	5	6.2 23.	
2-11-63 1255	2,670	60	10.1	101	202	7.6 / 7.7		1.92[c]	6.5 / 0.28		0 / 0.00	115 / 1.88		3.2 / 0.09			0.3			120[e]	13	96	2	50	7,000. 230.	
3-11-63 1205	891	59	11.5	113	255	8.0 / 7.8		2.33[c]	7.5 / 0.33		0 / 0.00	144 / 2.36		5.2 / 0.15			0.3			151[e]	12	117	0	20	50. 62.	
4-11-63 1545	5,580	54	11.8	110	175	7.8 / 8.0		1.59[c]	5.2 / 0.23		0 / 0.00	98 / 1.61		3.5 / 0.10			0.0			104[e]	13	79	0	160	230. 230.	
5-6-63 1145	1,520	63	10.1	104	235	7.8 / 7.9	22 / 1.10	14 / 1.12	6.8 / 0.30	1.2 / 0.03	0 / 0.00	137 / 2.25	11 / 0.23	3.8 / 0.11	2.1 / 0.03	0.2 / 0.01	0.2	21	PO_4 = 0.10	147[g]	12	111	0	5	6.2 230.	
6-11-63 1140	360	70	8.9	99	287	8. / 8.2		2.76[c]	8.3 / 0.36		0 / 0.00	168 / 2.75		3.0 / 0.08			0.4			170[e]	12	138	0	2	2.3 2.3	
7-9-63 1315	220	79	10.0	123	288	8.2 / 8.0		2.74[c]	9.2 / 0.40		0 / 0.00	168 / 2.75		5.1 / 0.14			0.5			171[e]	13	137	0	5	1.2 .6	
8-6-63 1110	160	73	9.8	113	287	8. / 8.0		2.66[c]	9.2 / 0.40		0 / 0.00	160 / 2.62		7.6 / 0.21			0.2			170[e]	13	133	2	2	23. 6.2	
9-11-63 1530	220	74	9.1	106	245	8.0 / 8.2	25 / 1.25	13 / 1.03	7.4 / 0.32	1.0 / 0.03	0 / 0.00	141 / 2.31	9.0 / 0.19	5.8 / 0.16	0.7 / 0.01	0.1 / 0.01	0.3	15	As = 0.00 ABS = 0.0 PO_4 = 0.05	138[g]	12	114	0	2	2.1 .23	

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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32505-D-R 6-61 200 SPO

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by
							equivalents per million																			
RUSSIAN RIVER NEAR HOPLAND (SIA. 8a)																										
10-10-62						7.5			8.9		0	103		6.9			0.3								62.	USGS
1335	236	66	9.4	102	190	7.4		1.62[c]	0.39		0.00	1.69		0.19						112[e]	19	81	0	7	21.	
11-15-62						7.4			6.7		0	102		4.0			0.6								50.	
1315	345	56	10.0	97	177	7.7		1.54[c]	0.29		0.00	1.67		0.11						104[e]	16	77	0	15	13.	
12-12-62						7.3			7.2		0	90		3.6			0.3								62.	
1030	900	52	9.8	90	164	7.7		1.42[c]	0.31		0.00	1.48		0.10						96[e]	18	71	0	25	2,400.	
1-4-63						7.3			11		0	130		7.8			0.4								2.3	
1215	124	51	10.6	96	243	7.7		2.10[c]	0.48		0.00	2.13		0.22						143[e]	19	105	0	5	2.3	
2-13-63						7.2			6.4		0	84		3.5			0.4								62.	
1035	1,300	54	9.8	93	157	7.4		1.34[c]	0.28		0.00	1.38		0.10						92[e]	17	67	0	50	230.	
3-13-63						7.2			6.7		0	93		5.0			0.3								620.	
1130	468	53	10.8	101	181	7.6		1.54[c]	0.29		0.00	1.52		0.14						106[e]	16	77	1	50	230.	
4-11-63						7.6			5.2		0	80		3.5			0.1								230.	
1330	3,820	52	10.4	96	148	7.8		1.28[c]	0.23		0.00	1.31		0.10						87[e]	15	64	0	50	23.	
5-8-63						7.3	21	8.1	7.1	1.2	0	106	9.0	3.0	2.0	0.1	0.2	13	PO_4 = 0.10						230.	
0735	527	53	9.6	89	194	7.6	1.05	0.67	0.31	0.03	0.00	1.74	0.19	0.08	0.03	0.01				118[g]	15	86	0	25	620.	
6-11-63						8.			6.8		3	108		4.4			0.3								62.	
1000	156	68	10.2	113	200	8.3		1.78[c]	0.30		0.10	1.77		0.12						118[e]	14	89	0	10	5.	
7-9-63						7.6			7.0		0	106		4.5			0.2								62.	
1120	185	66	10.5	114	193	7.8		1.76[c]	0.30		0.00	1.74		0.13						113[e]	15	88	1	10	13.	
8-6-63						7.			6.6		0	98		5.0			0.0								6.2	
0945	163	66	10.5	114	182	8.0		1.61[c]	0.29		0.00	1.61		0.14						107[e]	15	80	0	2	6.2	
9-11-63						7.7	19	7.7	5.7	0.9	0	96	7.0	3.0	1.3	0.1	0.1	12	As = 0.00 ABS = 0.0						23.	
1410	244	68	10.0	111	199	7.9	0.95	0.63	0.25	0.02	0.00	1.57	0.15	0.08	0.02	0.01			PO_4 = 0.25	104[g]	14	79	0	4	13.	

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

32505-D-E 6-61 200 SPO

TABLE D-2

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO 1)

Date and time sampled P S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfates (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N C ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
RUSSIAN RIVER, EAST FORK AT POTTER VALLEY POWERHOUSE (STA 10a)																										
10-10-62 1155	338	63	8.4	90	161	7.5 / 7.7		1.40[c]	6.2 / 0.27		0 / 0.00	87 / 1.43		5.4 / 0.15			0.3			97[e]	16	70	0	20	620 23.	USGS
11-15-62 1145	309	54	10.1	97	150	7.6 / 7.6		1.28[c]	6.0 / 0.26		0 / 0.00	82 / 1.34		3.5 / 0.10			0.6			90[e]	17	64	0	45	6.2 23.	
12-12-62 0905	302	46	10.4	90	145	7.2 / 7.8		1.27[c]	5.5 / 0.24		0 / 0.00	80 / 1.31		2.8 / 0.08			0.4			87[e]	16	64	0	35	13. 62.	
1-4-63 1035	307	44	10.9	92	149	7.3 / 7.9		1.32[c]	6.0 / 0.26		0 / 0.00	82 / 1.34		5.6 / 0.16			0.3			90[e]	16	66	0	20	0.2 0.5	
2-13-63 0905	299	50	11.2	102	108	7.3 / 7.5		0.96[c]	3.3 / 0.14		0 / 0.00	60 / 0.98		1.2 / 0.03			0.1			65[e]	13	48	0	90	62. 13.	
3-13-63 1005	185	49	10.7	96	139	7.3 / 7.7		1.24[c]	3.9 / 0.17		0 / 0.00	76 / 1.25		2.8 / 0.08			0.2			84[e]	12	62	0	50	6.2 2.3	
4-11-63 1130	384	48	10.9	97	114	8.1 / 7.9		1.03[c]	3.3 / 0.14		0 / 0.00	64 / 1.05		2.0 / 0.06			0.0			69[e]	12	51	0	95	23. 2.3	
5-7-63 1550	300	59	10.0	102	129	7.4 / 7.9	15 / 0.75	5.5 / 0.45	4.0 / 0.17	0.5 / 0.01	0 / 0.00	73 / 1.20	5.2 / 0.11	1.7 / 0.05	0.5 / 0.01	0.2 / 0.01	0.2	12	As = 0.00 ABS = 0.0 PO_4 = 0.10	86[g]	12	60	0	45	23. 0.62	
6-11-63 0900	267	59	9.8	100	140	7. / 7.9		1.23[c]	4.3 / 0.19		0 / 0.00	80 / 1.31		1.6 / 0.05			0.3			84[e]	13	62	0	35	2.3 2.3	
7-9-63 1015	263	60	9.7	100	136	7.6 / 7.8		1.32[c]	4.1 / 0.18		0 / 0.00	79 / 1.29		2.4 / 0.07			0.3			82[e]	12	66	1	10	2.3 23	
8-6-63 0830	284	65	9.8	107	140	7. / 7.8		1.27[c]	4.2 / 0.18		0 / 0.00	76 / 1.25		2.6 / 0.07			0.0			84[e]	12	63	1	4	2.3 0.5	
9-11-63 1245	278	69	8.9	101	154	2.5 / 8.3	20 / 1.00	4.9 / 0.38	48 / 0.21	0.8 / 0.02	3 / 0.10	82 / 1.34	6.0 / 0.12	2.0 / 0.06	0.6 / 0.01	0.0 / 0.00	0.3	13	As = 0.00 ABS = 0.0 PO_4 = 0.00	96[g]	13	69	0	5	6.2 50.	

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR); as indicated.

32505-OH 6-61 200 JPC

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in ppm: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
														ppm / equivalents per million												
NAPA RIVER NEAR ST. HELENA (STA. 72)																										
10-10-62 1605	1.3	65	4.2	45	395	7.0 / 7.6		3.38[c]	18 / 0.78		0 / 0.00	194 / 3.18		12 / 0.34			0.1			261[e]	19	169	10	45	620. 230.	USGS
11-15-62 1700	11	57	12.6	122	319	7.3 / 7.9		1.86[c]	30 / 1.30		0 / 0.00	120 / 1.97		30 / 0.85			0.9			211[e]	41	93	0	3	62. 6.2	
12-12-62 1230	15	52	8.6	78	275	7.0 / 7.8		1.87[c]	22 / 0.96		0 / 0.00	113 / 1.85		18 / 0.51			0.5			182[e]	34	93	0	2	230. 230.	
1-4-63 1425	38	52	9.4	86	240	7.1 / 7.5		1.68[c]	16 / 0.70		0 / 0.00	94 / 1.54		16 / 0.45			0.2			158[e]	29	84	7	5	230. 230.	
2-13-63 1235	835	58	10.0	98	114	7.0 / 7.3		0.82[c]	7.3 / 0.32		0 / 0.00	50 / 0.82		4.5 / 0.13			0.0			75[e]	28	41	0	170	2,400. 7,000.+	
3-13-63 1325	36	60	13.9	140	255	7.2 / 7.5		1.84[c]	16 / 0.70		0 / 0.00	110 / 1.80		12 / 0.34			0.2			168[e]	28	92	0	2	130. 62.	
4-11-63 1745	370	55	10.2	97	137	7.5 / 7.9		0.97[c]	8.0 / 0.35		0 / 0.00	64 / 1.05		4.3 / 0.12			0.1			90[e]	27	49	0	30	2,400. 2,400.	
5-8-63 1000	57	57	9.6	93	220	7.1 / 7.6	19 / 0.95	8.3 / 0.68	13 / 0.57	2.0 / 0.05	0 / 0.00	103 / 1.69	13 / 0.27	9.0 / 0.25	4.6 / 0.07	0.4 / 0.02	0.3	38	$\frac{As}{ABS}$ = 0.01, PO_4 = 0.30	158[g]	25	82	2	8	7,000.+ 7,000.+	
6-11-63 1300	16	75	9.5	113	203	7. / 7.8		1.60[c]	11 / 0.48		0 / 0.00	112 / 1.84		8.6 / 0.24			0.2			134[e]	23	80	0	5	130. 6.2	
7-9-63 1420	5.2	76	12.6	151	335	7.3 / 8.3		2.52[c]	19 / 0.83		3 / 0.10	138 / 2.26		20 / 0.56			0.5			221[e]	25	126	8	1	23. 23.	
8-6-63 1220	2.4	75	9.4	112	354	7. / 7.9		2.90[c]	19 / 0.83		0 / 0.00	168 / 2.75		16 / 0.45			0.4			234[e]	22	145	7	9	62. 230.	
9-11-63 1645	Ponded																									

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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32505-D-B 6-61 200 3P0

TABLE D-2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T.	Discharge in cfs Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfates (SO_4)	Chlorides (Cl)	Nitrates (NO_3)	Fluorides (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CoCO_3$: Total ppm	Hardness as $CoCO_3$: N C ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
							equivalents per million																			
ALAMEDA CREEK NEAR NILES (STA. 73)																										
10/1-12/62	24				645	7.8	35 / 1.75	19 / 1.57	67 / 2.91	4.1 / 0.10	0 / 0.00	168 / 2.75	41 / 0.96	94 / 2.65	1.7 / 0.03	0.7 / 0.04	0.4	19	Fe = 0.00 Color = 9	367[g]	46	166	28			USGS
10/13-15/62	323				363	8.2	26 / 1.30	11 / 0.90	30 / 1.30	6.0 / 0.15	0 / 0.00	116 / 1.90	37 / 0.77	31 / 0.87	10 / 0.16	0.5 / 0.03	0.3	16	Fe = 0.04 Color = 70	235[g]	36	110	15			
10/16-31/62	21				710	7.6	44 / 2.20	22 / 1.81	66 / 2.87	4.7 / 0.12	0 / 0.00	193 / 3.16	56 / 1.17	91 / 2.57	4.8 / 0.08	0.3 / 0.02	0.4	21	Fe = 0.00 Color 20	426[g]	41	200	42			
11/5-15/62	17				829	8.0	45 / 2.25	22 / 1.81	85 / 3.70	4.8 / 0.12	0 / 0.00	184 / 3.02	67 / 1.39	128 / 3.61	5.1 / 0.08	0.3 / 0.02	0.5	25	Fe = 0.00 Color = 15	473[g]	47	203	52			
11/16-30/62	20				890	8.2	49 / 2.45	24 / 1.97	91 / 3.96	5.2 / 0.13	0 / 0.00	190 / 3.11	74 / 1.54	131 / 3.70	7.1 / 0.11	0.4 / 0.02	0.5	22	Fe = 0.01 Color = 5	516[g]	47	221	65			
12/1-10/62	3.1				903	8.2	61 / 3.04	27 / 2.24	86 / 3.74	4.4 / 0.11	0 / 0.00	250 / 4.10	87 / 1.81	122 / 3.44	1.3 / 0.02	0.4 / 0.02	0.6	16	Fe = 0.00 Color = 10	534[g]	41	264	59			
12/11-20/62	9.9				886	8.1	62 / 3.09	31 / 2.59	72 / 3.13	6.3 / 0.16	0 / 0.00	280 / 4.59	83 / 1.73	100 / 2.82	8.4 / 0.14	0.4 / 0.02	0.6	13	Fe = 0.00 Color = 40	479[g]	35	284	54			
12/21-31/62	5.8				1,030	8.1	62 / 3.09	38 / 3.13	96 / 4.18	8.4 / 0.21	0 / 0.00	296 / 4.85	87 / 1.81	130 / 3.67	19 / 0.31	0.5 / 0.03	0.4	20	Fe = 0.01 Color = 25	574[g]	39	311	68			
1/1-12/63	2.9				1,220	7.5	76 / 3.79	40 / 3.29	125 / 5.44	8.8 / 0.23	0 / 0.00	325 / 5.33	99 / 2.06	169 / 4.77	18 / 0.29	0.4 / 0.02	0.9	22	Fe = 0.0 Color = 20	743[g]	43	354	88			
1/14-18/63	15				868	7.9	45 / 2.25	24 / 1.95	95 / 4.13	4.8 / 0.12	0 / 0.00	182 / 2.98	65 / 1.35	135 / 3.81	8.2 / 0.13	0.4 / 0.02	0.4	22		512[g]	49	210	61			
1/19-30/63	11				1,000	7.4	54 / 2.69	25 / 2.05	113 / 4.92	6.8 / 0.17	0 / 0.00	196 / 3.21	80 / 1.67	161 / 4.54	19 / 0.31	0.4 / 0.02	0.7	21	Fe = 0.00 Color = 7	604[g]	50	237	76			
1/31/63	850				446	7.0	33 / 1.65	14 / 1.15	38 / 1.65	7.4 / 0.19	0 / 0.00	172 / 2.82	30 / 0.62	38 / 1.07	1.8 / 0.03	0.3 / 0.02	0.3	18			36	140	0			
2/1-2/63	2,420				251	8.0	24 / 1.20	8.5 / 0.70	73 / 0.57	2.9 / 0.07	0 / 0.00	115 / 1.88	19 / 0.40	10 / 0.28	3.2 / 0.05	0.4 / 0.02	0.3	12			22	95	1			

o Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

32505-D-8 6-61 200 SPO

SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T.	Discharge in cfs Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
ALAMEDA CREEK NEAR NILES (STA. 73)																										
2/4-12/63	87				542	7.6	43 / 2.15	21 / 1.69	39 / 1.70	3.7 / 0.09	0 / 0.00	198 / 3.25	61 / 1.27	38 / 1.07	5.2 / 0.08	0.3 / 0.02	0.4	18	Fe = 0.0 Color = 30	345[g]	30	192	30			USGS
2/13-18/63	431				373	7.7	32 / 1.60	14 / 1.18	24 / 1.04	3.7 / 0.09	0 / 0.00	160 / 2.62	35 / 0.73	22 / 0.62	3.7 / 0.06	0.4 / 0.02	0.4	14	Fe = 0.0 Color = 35	240[g]	27	139	8			
2/19-28/63	32				744	7.7	56 / 2.77	30 / 2.43	58 / 2.52	4.6 / 0.12	0 / 0.00	258 / 4.23	91 / 1.89	58 / 1.64	4.3 / 0.07	0.4 / 0.02	0.5	16	Fe = 0.0 Color = 20	460[g]	32	261	49			
3/1-15-63	24				953	7.9	57 / 2.84	29 / 2.36	97 / 4.22	4.7 / 0.12	0 / 0.00	226 / 3.70	105 / 2.19	130 / 3.67	9.0 / 0.15	0.4 / 0.02	0.7	17	Fe = 0.0 Color = 15	589[g]	44	260	75			
3/16-26/63	31				836	7.8	53 / 2.64	26 / 2.10	81 / 3.52	5.0 / 0.13	0 / 0.00	210 / 3.44	87 / 1.81	104 / 2.93	11 / 0.18	0.3 / 0.02	0.7	16	Fe = 0.01 Color = 14	520[g]	42	237	65			
3/28-31/63	367				460	7.7	37 / 1.85	19 / 1.53	30 / 1.30	3.4 / 0.09	0 / 0.00	186 / 3.05	47 / 0.98	26 / 0.73	4.9 / 0.08	0.3 / 0.02	0.3	16	Fe = 0.06 Color = 35	290[g]	27	169	16			
4/1-6/63	63				645	8.3	52 / 2.59	27 / 2.23	46 / 2.00	3.6 / 0.09	3 / 0.10	234 / 3.84	73 / 1.52	52 / 1.47	6.0 / 0.10	0.3 / 0.02	0.5	20	Fe = 0.02 Color = 18	400[g]	29	241	44			
4/7-17/63	336				430	8.3	37 / 1.85	18 / 1.51	26 / 1.13	2.8 / 0.07	3 / 0.10	181 / 2.97	44 / 0.92	22 / 0.62	3.5 / 0.06	0.2 / 0.01	0.3	18	Fe = 0.08 Color = 38	265[g]	25	168	15			
4/18-27/63	270				454	8.2	40 / 2.00	19 / 1.58	28 / 1.22	5.2 / 0.13	0 / 0.00	195 / 3.20	40 / 0.83	25 / 0.71	2.8 / 0.05	0.3 / 0.02	0.3	18	Fe = 0.07 Color = 28	277[g]	25	179	19			
4/28-30/63	75				657	7.6	61 / 3.04	25 / 2.02	44 / 1.91	2.6 / 0.07	0 / 0.00	249 / 4.08	76 / 1.58	41 / 1.16	3.0 / 0.05	0.4 / 0.02	0.5	19	Fe = 0.01	401[g]	27	253	49			
5/1-10/63	33				776	7.8	65 / 3.24	34 / 2.82	55 / 2.39	3.1 / 0.08	0 / 0.00	283 / 4.64	94 / 1.96	55 / 1.55	3.2 / 0.05	0.3 / 0.02	0.6	17	Fe = 0.03	465[g]	28	303	71			
5/11-26/63	18				1,150	8.2	72 / 3.59	51 / 4.17	100 / 4.35	5.0 / 0.13	0 / 0.00	340 / 5.57	138 / 2.87	124 / 3.50	4.8 / 0.08	0.4 / 0.02	0.9	18	Fe = 0.02 Color = 10	696[g]	36	388	109			
5/27-30/63	21				890	7.6		5.14[c]	80 / 3.48	3.7 / 0.09	0 / 0.00	213 / 3.49	97 / 2.02	111 / 3.13	4.6 / 0.07	0.4 / 0.02	0.7	21	Fe = 0.02		40	257	82			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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32505-0-8 6-61 200 SPO

TABLE D-2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen		Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million												Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$		Turbidity in ppm	Coliform MPN/ml	Analyzed by i
							Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonates (CO_3)	Bicarbonates (HCO_3)	Sulfates (SO_4)	Chlorides (Cl)	Nitrates (NO_3)	Fluorides (F)	Boron (B)	Silica (SiO_2)	Other constituents			Total ppm	N.C. ppm			
	Mean		ppm	%Sat		a / b	equivalents per million																		
ALAMEDA CREEK NEAR NILES (STA. 73)																									
6/1-9/63	21				845	8.4	64 / 3.19	25 / 2.06	78 / 3.39	4.0 / 0.10	7 / 0.23	212 / 3.47	88 / 1.83	100 / 2.82	5.0 / 0.08	0.3 / 0.02	0.8	21	Fe = 0.04 Color = 7	502[g]	39	262	76			USGS
6/10-22/63	16				822	8.4	55 / 2.74	29 / 2.42	71 / 3.09	4.2 / 0.11	7 / 0.23	220 / 3.61	80 / 1.67	92 / 2.60	4.3 / 0.07	0.4 / 0.02	0.8	14	Fe = 0.02 Color = 6	470[g]	37	258	65			
6/23-30/63	20				708	8.0	47 / 2.35	25 / 2.08	62 / 2.70	3.7 / 0.09	0 / 0.00	202 / 3.31	65 / 1.35	80 / 2.26	5.2 / 0.08	0.3 / 0.02	0.6	16	Fe = 0.02 Color = 7	402[g]	37	222	56			
7/1-10/63	19				646	7.6	40 / 2.00	22 / 1.78	60 / 2.61	3.9 / 0.10	0 / 0.00	176 / 2.88	47 / 0.98	82 / 2.31	4.7 / 0.08	0.3 / 0.02	0.6	18	Fe = 0.00 Color = 10	380[g]	40	189	45			
7/11-20/63	23				728	7.7	50 / 2.50	27 / 2.24	61 / 2.65	4.6 / 0.12	0 / 0.00	224 / 3.67	64 / 1.33	85 / 2.40	5.7 / 0.09	0.5 / 0.03	0.5	19	Fe = 0.00 Color = 10	434[g]	35	237	53			
7/22-31/63	17				663	8.4	50 / 2.50	25 / 2.06	52 / 2.26	3.1 / 0.08	7 / 0.23	207 / 3.39	66 / 1.37	65 / 1.83	4.7 / 0.08	0.4 / 0.02	0.6	17	Fe = 0.03 Color = 8	391[g]	33	228	47			
8/1-10/63	21				597	7.8	44 / 2.20	23 / 1.90	44 / 1.91	3.4 / 0.09	0 / 0.00	201 / 3.29	44 / 0.92	57 / 1.61	4.1 / 0.07	0.5 / 0.03	0.4	18	Fe = 0.02 Color = 15	343[g]	31	205	40			
8/11-20/63	28				538	8.0	38 / 1.90	19 / 1.60	42 / 1.83	3.0 / 0.08	0 / 0.00	176 / 2.88	44 / 0.92	56 / 1.58	3.0 / 0.05	0.4 / 0.02	0.3	18	Fe = 0.00 Color = 15	316[g]	34	175	31			
8/21-31/63	28				547	8.0	37 / 1.85	19 / 1.57	44 / 1.91	2.4 / 0.06	0 / 0.00	174 / 2.85	44 / 0.92	61 / 1.72	2.8 / 0.05	0.3 / 0.02	0.4	17	Fe = 0.00 Color = 15	309[g]	35	171	28			
9/1-10/63	25				574	8.1	38 / 1.90	19 / 1.60	47 / 2.04	3.1 / 0.08	0 / 0.00	79 / 2.93	33 / 0.69	66 / 1.86	3.1 / 0.05	0.0 / 0.00	0.2	20	Fe = 0.01 Color = 10	337[g]	36	175	28			
9/11-20/63	22				592	8.1	38 / 1.90	18 / 1.50	54 / 2.35	3.1 / 0.08	0 / 0.00	171 / 2.80	47 / 0.98	74 / 2.09	2.8 / 0.05	0.0 / 0.00	0.2	17	Fe = 0.01 Color = 5	345[g]	40	170	30			
9/21-30/63	35				661	8.2	38 / 1.90	20 / 1.62	66 / 2.87	3.3 / 0.08	0 / 0.00	172 / 2.82	50 / 1.04	92 / 2.60	3.0 / 0.05	0.0 / 0.00	0.3	22	Fe = 0.01 Color = 10	389[g]	44	176	35			

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

32505-D-B 6-62 200 SPO

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million — Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ NC ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
ALAMEDA CREEK NEAR NILES (STA. 73)																										
10-1-62						7.4			69		0	146		87			0.5								620.	USGS
1340	39	69	9.8	108	585	8.0		3.04[c]	3.00		0.00	2.39		2.45						352[e]	50	152	32	90	2,400.	
11-7-62						8.0			84		0	193		116			0.4								6.2	
1625	4.5	58	10.7	104	797	8.0		4.20[c]	3.65		0.00	3.16		3.27						480[e]	46	210	52	25	6.2	
12-5-62						8.0			90		0	253		114			0.4								2.8	
1020	2.1	50	11.2	99	910	8.0		5.45[c]	3.92		0.00	4.15		3.22						548[e]	42	273	66	5	6.2	
1-10-63						8.3			110		0	332		166			0.6								62.	
1050	2,	45	14.3	118	1,180	8.1		7.37[c]	4.78		0.00	5.44		4.68						710[e]	39	368	96	15	6.2	
2-5-63						7.8			34		0	187		34			0.2		ABS = 0.10						1,300.	
1140	120	58	10.3	100	512	7.7		3.80[c]	1.48		0.00	3.06		0.96						308[e]	28	190	37	90	620.	
3-6-63						8.3			78		0	238		105			0.6		ABS = 0.10						230.	
1930	199	52	14.4	130	883	8.1		5.30[c]	3.39		0.00	3.90		2.96						532[e]	39	265	70	4	62.	
4-8-63						8.1			26		0	206		19			0.3		ABS = 0.00						230.	
1305	366	59	10.0	98	457	7.9		3.69[c]	1.13		0.00	3.34		0.54						275[e]	23	184	17	50	620.	
																			As = 0.01							
5-14-63						8.4	91	32	88	4.2	26	282	131	96	4.0	0.3	0.8	11	ABS = 0.0						1.3	
1330	33	66	9.5	101	1,010	8.6	4.54	2.60	3.83	0.11	0.87	4.62	2.73	2.71	0.06	0.02			PO_4 = 0.00	621[h]	35	357	81	2	2.3	
6-5-63						8.			68		16	216		90			0.8		ABS = 0.20						6.2	
1640	12	72	12.0	136	806	8.7		5.44[c]	2.96		0.53	3.54		2.54						485[e]	35	272	69	10	230.	
7-1-63						8.2			56		0	165		69			0.4		ABS = 0.1						21.	
2230	34	66	11.5	123	590	8.2		3.44[c]	2.44		0.00	2.70		1.95						359[e]	41	172	37	9	620.	
8-6-63						8.1			44		0	184		56			0.4		ABS = 0.2						2,400.	
1820	31	72	8.3	94	543	8.2		3.52[c]	1.91		0.00	3.02		1.58						327[e]	35	176	25	80	62.	
																			As = 0.02							
9-4-63						8.0	36	19	48	2.7	0	171	44	58	4.9	0.3	0.4	14	ABS = 0.00						23.	
1615	28	70	8.8	98	570	8.2	1.80	1.58	2.09	0.07	0.00	2.80	0.92	1.64	0.08	0.02			PO_4 = 0.05	322[h]	38	169	29	75	62.	
ARROYO DE LA LAGUNA AT VERONA (STA. 202)																										
10/11-12/62	[illegible]						32	17	67	3.3	0	149	30	96	2.6	0.2	0.3	23	Fe = 0.00							USGS
	mean				620	7.8	1.60	1.38	2.91	0.08	0.00	2.44	0.62	2.71	0.04	0.01			Color = 15	355[h]	49	149	27			
10/13-15/62	169						27	11	28	6.8	0	120	37	28	8.3	0.5	0.3	16	Fe = 0.05							
	mean				376	7.1	1.35	0.91	1.22	0.17	0.00	1.97	0.77	0.79	0.13	0.03			Color = 100	243[h]	33	113	15			

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 / 0.00 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc (TTL), or California Department of Water Resources (DWR), as indicated

TABLE D-2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled PST	Discharge in cfs Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos) at 25°C	pH a / b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N C ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
ARROYO DE LA LAGUNA AT VERONA (STA. 202)																										
10/16-31/62	9.3				730	7.5	40 / 2.0	22 / 1.8	69 / 3.00	5.4 / 0.14	0 / 0.00	176 / 2.88	54 / 1.12	106 / 2.99	5.6 / 0.09	0.3 / 0.02	0.6	23	Fe = 0.00 Color = 20	438[g]	43	190	46			USGS
11/1-12/62	12				810	7.5	40 / 2.00	22 / 1.81	87 / 3.78	4.6 / 0.12	0 / 0.00	167 / 2.74	51 / 1.06	134 / 3.78	7.7 / 0.12	0.3 / 0.02	0.5	23	Fe = 0.01 Color = 10	477[g]	49	198	53			
11/13-22/62	12				945	7.5	45 / 2.25	24 / 1.99	108 / 4.70	5.9 / 0.15	0 / 0.00	178 / 2.92	73 / 1.52	161 / 4.54	10 / 0.16	0.4 / 0.02	0.4	22	Fe = 0.00 Color = 5	550[g]	52	212	66			
11/23-30/62	13				846	7.9	43 / 2.15	22 / 1.85	95 / 4.13	5.2 / 0.13	0 / 0.00	162 / 2.66	67 / 1.39	144 / 4.06	8.8 / 0.14	0.3 / 0.02	1.0	21	Fe = 0.00 Color = 15	502[g]	50	200	67			
12/1-10/62	2.5				1,130	7.9	69 / 3.44	37 / 3.06	108 / 4.70	8.8 / 0.23	0 / 0.00	322 / 5.28	71 / 1.48	168 / 4.74	7.9 / 0.13	0.8 / 0.04	0.8	23	Fe = 0.00 Color = 10	673[g]	41	325	61			
12/11-19/62	4.8				1,090	7.5	50 / 2.50	35 / 2.84	114 / 4.96	18 / 0.46	0 / 0.00	274 / 4.49	67 / 1.39	148 / 4.18	35 / 0.56	0.7 / 0.04	0.8	23	Fe = 0.00 Color = 50	676[g]	46	267	42			
12/20-31/62	5				1,580	7.2	39 / 1.95	55 / 4.53	195 / 8.48	3.1 / 0.08	0 / 0.00	268 / 4.39	81 / 1.69	266 / 7.50	51 / 0.82	2.5 / 0.13	0.8	33	Fe = 0.01 Color = 45	869[g]	56	324	104			
1/1-12/63	2.5				1,630	7.9	71 / 3.54	63 / 5.18	174 / 7.57	18 / 0.46	0 / 0.00	365 / 5.98	95 / 1.98	271 / 7.64	37 / 0.60	1.5 / 0.08	1.3	31	Fe = 0.01 Color = 30	990[g]	45	436	137			
1/13-18/63	15				906	8.2	47 / 2.35	24 / 1.97	100 / 4.35	4.8 / 0.12	0 / 0.00	194 / 3.18	71 / 1.48	148 / 4.18	9.8 / 0.16	0.3 / 0.02	0.5	23	Fe = 0.00	524[g]	49	216	57			
1/19-30/63	6.7				1,050	8.3	50 / 2.50	31 / 2.57	112 / 4.87	7.2 / 0.18	7 / 0.23	202 / 3.31	82 / 1.71	171 / 4.82	16 / 0.26	0.5 / 0.03	0.7	26	Fe = 0.00 Color = 1	621[g]	48	254	77			
1/31/63	140				522	7.0		2.72[c]	56 / 2.44	10 / 0.26	0 / 0.00	170 / 2.79	38 / 0.79	48 / 1.35	6.2 / 0.10	0.5 / 0.03	0.4	19			45	136	0			
2/1-2/63	8,070				239	7.6		1.86[c]	14 / 0.61	3.0 / 0.08	0 / 0.00	113 / 1.85	17 / 0.35	4.8 / 0.14	3.7 / 0.06	0.5 / 0.03	0.2	13			24	93	0			
2/3-5/63	119				362	7.8	30 / 1.50	14 / 1.18	22 / 0.96	3.2 / 0.08	0 / 0.00	149 / 2.44	34 / 0.71	3.1 / 0.09	5.0 / 0.08	0.3 / 0.02	0.3	16			26	134	12			
2/6-12/63	37				602	7.7	45 / 2.25	23 / 1.92	44 / 1.91	4.9 / 0.13	0 / 0.00	213 / 3.49	65 / 1.35	47 / 1.33	4.0 / 0.15	0.5 / 0.03	0.5	20	Fe = 0.00 Color = 35	370[g]	31	208	33			

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T.	Discharge in cfs Mean	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: NC ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
							equivalents per million																			
ARROYO DE LA LAGUNA AT VERONA (STA. 202)																										
2/13-18/63	181				376	8.0	31 / 1.55	15 / 1.24	25 / 1.09	3.3 / 0.08	0 / 0.00	164 / 2.69	33 / 0.69	19 / 0.54	4.0 / 0.06	0.4 / 0.02	0.4	17	Fe = 0.02	230[g]	28	140	6			USGS
2/19-22/63	29				715	7.9	50 / 2.50	28 / 2.34	57 / 2.48	4.3 / 0.11	0 / 0.00	250 / 4.10	80 / 1.67	59 / 1.66	7.1 / 0.11	0.3 / 0.02	0.5	18	Fe = 0.00 Color = 20	429[g]	33	242	37			
2/23-28/63	9.2				1,150	7.9	67 / 3.34	46 / 3.76	112 / 4.87	6.6 / 0.17	0 / 0.00	335 / 5.49	147 / 3.06	132 / 3.72	9.2 / 0.15	0.4 / 0.02	0.9	19	Fe = 0.00 Color = 17	714[g]	40	355	80			
3/1-12/63	17				994	7.4	52 / 2.59	28 / 2.29	112 / 4.87	5.4 / 0.14	0 / 0.00	196 / 3.21	101 / 2.10	150 / 4.23	15 / 0.24	0.2 / 0.01	0.8	19	Fe = 0.01 Color = 13	616[g]	49	244	83			
3/13-24/63	18				921	7.4	50 / 2.50	27 / 2.20	99 / 4.31	7.6 / 0.19	0 / 0.00	203 / 3.33	87 / 1.81	126 / 3.55	20 / 0.32	0.4 / 0.02	0.7	16	Fe = 0.02 Color = 30	565[g]	47	235	69			
3/25-30/63	81				517	7.8	39 / 1.95	20 / 1.63	39 / 1.70	3.5 / 0.09	0 / 0.00	196 / 3.21	50 / 1.04	37 / 1.04	6.7 / 0.11	0.4 / 0.02	0.5	16	Fe = 0.05 Color = 40	323[g]	32	179	18			
4/1-3/63	15				582	7.5	47 / 2.35	25 / 2.05	39 / 1.70	3.0 / 0.08	0 / 0.00	226 / 3.70	63 / 1.31	44 / 1.24	4.5 / 0.07	0.2 / 0.01	0.5	16	Fe = 0.04 Color = 22		28	220	35			
4/7-20/63	128				482	7.6	39 / 1.95	20 / 1.67	33 / 1.44	3.4 / 0.09	0 / 0.00	204 / 3.34	48 / 1.00	26 / 0.73	4.9 / 0.08	0.2 / 0.01	0.3	19	Fe = 0.06 Color = 45	300[g]	28	181	14			
4/21-30/63	58				554	7.8	45 / 2.25	25 / 2.07	36 / 1.57	3.0 / 0.08	0 / 0.00	232 / 3.80	55 / 1.15	35 / 0.99	3.5 / 0.06	0.2 / 0.01	0.3	17	Fe = 0.02 Color = 18	339[g]	26	216	26			
5/1-8/63	15				753	7.9	59 / 2.94	32 / 2.67	53 / 2.31	3.0 / 0.08	0 / 0.00	271 / 4.44	83 / 1.73	56 / 1.58	4.4 / 0.07	0.3 / 0.02	0.4	16	Fe = 0.00 Color = 8	452[g]	29	280	58			
5/9-25/63	9.0				1,290	8.2	75 / 3.74	50 / 4.08	131 / 5.70	6.8 / 0.17	0 / 0.00	341 / 5.59	153 / 3.19	155 / 4.37	14 / 0.23	0.3 / 0.02	0.9	18	Fe = 0.01 Color = 14	797[g]	42	391	111			
5/26-31/63	21				798	7.6	41 / 2.05	22 / 1.81	84 / 3.65	3.7 / 0.09	0 / 0.00	160 / 2.62	67 / 1.39	110 / 3.10	9.3 / 0.15	0.2 / 0.01	0.5	21	Fe = 0.01 Color = 12	462[g]	48	193	62			
6/1-10/63	19				713	8.0	41 / 2.05	22 / 1.78	72 / 3.13	3.8 / 0.10	0 / 0.00	160 / 2.62	67 / 1.39	97 / 2.74	10 / 0.16	0.2 / 0.01	0.6	24	Fe = 0.06 Color = 15	433[g]	44	191	60			

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR); as indicated.

TABLE D-2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO 2)

Date and time sampled PST	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a/b	Mineral constituents in ppm / ppm equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
ARROYO DE LA LAGUNA AT VERONA (STA. 202)																										
6/11-20/63	8.1 mean				843	7.6	53 / 2.59	30 / 2.49	74 / 3.22	5.4 / 0.14	0 / 0.00	226 / 3.70	74 / 1.54	107 / 3.02	6.5 / 0.10	0.3 / 0.02	0.8	21	Fe = 0.03 Color = 12	505[g]	38	254	69			USGS
6/21-30/63	12 mean				626	8.0	38 / 1.90	21 / 1.71	56 / 2.44	3.6 / 0.09	0 / 0.00	163 / 2.67	54 / 1.12	77 / 2.17	8.0 / 0.13	0.1 / 0.01	0.4	18	Fe = 0.04 Color = 11	375[g]	40	180	46			
ARROYO DEL VALLE NEAR LIVERMORE (STA. 71)																										
10-1-62 1035	Dry																									
11-5-62 1340	Ponded																									
12-5-62 1100	Ponded																									
1-10-63 1140	0.7	48	8.0	70	1,050	7.8 / 8.4		8.32[e]	76 / 3.31		15 / 0.50	397 / 6.51		76 / 2.14			1.1			646[e]	28	416	65	3		
2-5-63 1100	60	56	9.0	87	436	7.8 / 8.0		3.78[e]	20 / 0.87		0 / 0.00	204 / 3.34		14 / 0.39			0.5			268[e]	19	189	22	3		
3-6-63 2030	8.4	54	10.0	94	528	8.2 / 8.5		4.58[e]	26 / 1.13		10 / 0.33	238 / 3.90		17 / 0.48			0.5			325[e]	20	229	17	1		
4-8-63 1215	202	59	10.4	104	359	8.8 / 8.2		3.34[e]	14 / 0.57		0 / 0.00	190 / 3.11		6.0 / 0.17			0.2			221[e]	15	167	11	40		
5-14-63 1300	21	68	9.5	106	348	8.1 / 8.3	56 / 2.79	21 / 1.75	22 / 0.96	1.8 / 0.05	9 / 0.30	242 / 3.97	51 / 1.06	13 / 0.37	0.7 / 0.01	0.3 / 0.02	0.3	15	As = 0.01 ABS = 0.1 PO_4 = 2.1	308[g]	17	227	14	110		
6-5-63 1830	5.0	69	8.2	92	517	8.4		4.44[e]	29 / 1.26		6 / 0.20	240 / 3.93		12 / 0.34			0.5			318[e]	22	222	15	5		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (No. 2)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
							equivalents per million																			
ARROYO DEL VALLE NEAR LIVERMORE (STA. 71)																										
7-1-63 2320	1.6	63	8.2	86	615	8.2 / 8.4		5.16[c]	36 / 1.57		4 / 0.13	276 / 4.52		28 / 0.79			0.6			378[g]	23	258	25	1			USGS
8-5-63 1010	0.7	71	7.0	80	739	7.8 / 8.2		5.78[c]	50 / 2.18		0 / 0.00	348 / 5.70		12 / 0.34			0.8			454[e]	27	289	4	2			
9-3-63 1045	0.1	70	8.3	94	857	7.2 / 8.2	67 / 3.34	41 / 3.38	62 / 2.70	3.2 / 0.08	0 / 0.00	385 / 6.31	76 / 1.58	56 / 1.58	0.5 / 0.01	0.3 / 0.02	1.1	23	As = 0.00 ABS = 0.0 PO_4 = 0.05	514[g]	28	336	20	2		
ALTAMONT CREEK AT ALTAMONT TURNOUT OF SOUTH BAY AQUEDUCT (STA. 201)																										
3-1-63 1515					1,000	/ 8.3	38 / 1.90	22 / 1.84	134 / 5.83	3.0 / 0.08	6 / 0.20	180 / 2.95	90 / 1.87	162 / 4.57	0.2 / 0.00	0.2 / 0.01	1.2	12	ABS = 0.0	483[g]	60	187	30			DWR
3-18-63 1615					2,170	/ 8.3	36 / 1.80	44 / 3.59	338 / 14.70	7.5 / 0.19	0 / 0.00	508 / 8.33	113 / 2.35	349 / 9.84	5.6 / 0.09	2.0 / 0.10	7.4	18	ABS = 0.0	1,290[g]	72	270	0			
4-1-63 1230					2,480	/ 8.5	28 / 1.40	58 / 4.73	462 / 20.10	3.8 / 0.10	20 / 0.67	650 / 10.65	130 / 2.71	422 / 11.90	3.0 / 0.05	1.7 / 0.09	8.4	7.5	ABS = [illegible]	1,530[g]	76	307	0			
4-15-63 1600					984	/ 7.9	23 / 1.15	20 / 1.63	157 / 6.83	6.6 / 0.17	0 / 0.00	300 / 4.92	25 / 0.52	150 / 4.23	1.5 / 0.02	0.3 / 0.02	2.4	16	ABS = 0.0	585[g]	70	139	0			
5-27-63 1230	0.9				722	/ 7.9	30 / 1.50	15 / 1.26	88 / 3.83	2.6 / 0.07	0 / 0.00	130 / 2.13	73 / 1.52	108 / 3.04	2.0 / 0.03	0.2 / 0.01	0.92	14	ABS = 0.02 Cu = 0.00 Zn = 0.00	409	58	138	31			
6-10-63 1415					2,290	/ 8.2	41 / 2.04	46 / 3.79	412 / 17.92	1.8 / 0.05	0 / 0.00	656 / 10.75	109 / 2.27	374 / 10.55	4.5 / 0.07	1.6 / 0.08	8.6	17	Cu = 0.00 Zn = 0.00 Fe = 0.01	1,321	75	292	0			
7-8-63 1135					2,520	/ 8.6	27 / 1.35	48 / 3.92	492 / 21.40	3.0 / 0.08	35 / 1.17	619 / 10.14	122 / 2.54	442 / 12.46	5.1 / 0.08	1.8 / 0.09	9.5	14	ABS = 0.01 Cu = 0.00 Zn = 0.00	1,510[g]	80	264	0			
7-22-63 1200					345	/ 7.9	19 / 0.95	8.6 / 0.71	36 / 1.57	1.9 / 0.05	0 / 0.00	74 / 1.21	30 / 0.62	48 / 1.35	1.4 / 0.02	0.1 / 0.00	0.14	14	ABS = 0.0 Cu = 0.00 Zn = 0.00	198[g]	48	83	22			
8-5-63 1355					1,830	/ 9.2	11 / 0.55	29 / 2.37	351 / 15.27	3.4 / 0.09	81 / 2.70	237 / 3.88	98 / 2.04	337 / 9.51	0.2 / 0.00	1.0 / 0.05	6.9	1.5	ABS = 0.0 Cu = 0.00 Zn = 0.00	1,050[g]	84	146	0			

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated

TABLE D-2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
							equivalents per million																			
ALTAMONT CREEK AT ALTAMONT TURNOUT OF SOUTH BAY AQUEDUCT (STA. 201)																										
8-19-63 1330					367	7.7	20 / 1.00	10 / 0.82	34 / 1.48	1.8 / 0.05	0 / 0.00	88 / 1.44	26 / 0.54	47 / 1.32	0.6 / 0.01	0.1 / 0.00	0.18	17	ABS = 0.0 Cu = 0.03 Zn = 0.00	216[g]	44	91	19			DWR
9-3-63 1740					375			1.90[c]					27 / 0.56	52 / 1.47					ABS = 0.0	218[g]		95				
9-30-63 1330					582			2.68[c]					42 / 0.87	90 / 2.54					ABS = 0.0	342[g]		134				
LOS GATOS CREEK NEAR LOS GATOS (STA. 74)																										
10-3-62 1540	0.6	65	8.7	94	960	8.0 / 7.9		9.78[c]	36 / 1.57		0 / 0.00	388 / 6.36		25 / 0.71			0.3			611[e]	14	489	171	45	620. 230.	USGS
11-7-62 1445	3.0	60	8.9	90	195	7.4 / 7.6		1.66[c]	7.5 / 0.33		0 / 0.00	70 / 1.15		5.8 / 0.16			0.0 / 0.0			124[e]	17	83	26	400	50. 13.	
12-4-62 2000	37	53	9.9	92	270	7.6 / 8.0		2.34[c]	9.3 / 0.40		0 / 0.00	114 / 1.87		6.8 / 0.19			0.1			172[e]	15	117	24	200	21. 6.2	
1-9-63 1530	105	49	11.0	97	281	7.4 / 7.8		2.40[c]	12 / 0.52		0 / 0.00	114 / 1.87		8.8 / 0.25			0.0			179[e]	18	120	27	30	6.2 0.62	
2-7-63 1245	300	58	10.4	103	208	7.7 / 7.6		1.74[c]	8.2 / 0.36		0 / 0.00	91 / 1.49		5.2 / 0.15			0.2			132[e]	17	87	12	240	23. 62.	
3-6-63 1830	53	53	10.5	98	224	7.7 / 8.1		1.90[c]	7.8 / 0.34		0 / 0.00	98 / 1.61		5.2 / 0.15			0.3			142[e]	15	95	15	420	6.2 1.3	
4-10-63 1145	250	54	10.5	99	240	7.5 / 7.8		2.20[c]	11 / 0.48		0 / 0.00	106 / 1.74		5.1 / 0.14			0.1			153[e]	18	110	23	95	23. 2.3	
5-16-63 1715	23	57	10.1	99	285	7.5 / 8.0	32 / 1.60	11 / 0.92	9.8 / 0.43	1.6 / 0.04	0 / 0.00	132 / 2.16	27 / 0.56	6.2 / 0.17	1.7 / 0.03	0.3 / 0.02	0.0	19	PO_4 = 0.10	190[g]	14	126	18	50	0.21 0.23	
6-4-63 1500	52	54	10.6	100	272	8. / 8.5		2.40[c]	9.3 / 0.40		2 / 0.07	136 / 2.23		5.2 / 0.15			0.1			173[e]	14	120	5	55	62. 0.23	

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination

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ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled PST	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N C ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by 1
LOS GATOS CREEK NEAR LOS GATOS (STA. 74)																										
7-2-63 1145	95	55	10.3	98	277	8.2 / 8.2		2.44[g]	9.8 / 0.43		0 / 0.00	126 / 2.07		7.0 / 0.20			0.0			176[e]	15	122	19	20	23. 23.	USGS
8-6-63 1710	68	61	9.5	98	309	7.8 / 8.4		2.88[g]	11 / 0.48		3 / 0.10	137 / 2.25		7.1 / 0.20			0.1			197[e]	14	144	27	20	1.3 230.	
9-5-63 0945	69	68	8.6	96	350	7.4 / 8.2	39 / 1.95	14 / 1.18	12 / 0.52	2.0 / 0.05	0 / 0.00	160 / 2.62	40 / 0.83	7.6 / 0.21	4.1 / 0.07	0.3 / 0.02	0.1	15	As = 0.02 ABS = 0.0 PO_4 = 0.00	229[g]	14	157	26	25	2.3 62	
COYOTE CREEK NEAR MADRONE (STA. 82)																										
10-1-62 1510	Dry																									
11-5-62 1515	16	62	11.3	117	622	8.2 / 8.4		5.66[g]	31 / 1.35		8 / 0.27	283 / 4.64		10 / 0.28			0.2			371[e]	19	283	38	5	23 6.2	USGS
12-3-62 1030	1.2	53	7.9	73	748	7.7 / 8.3		6.78[g]	39 / 1.70		6 / 0.20	349 / 5.72		33 / 0.93			0.2			447[e]	20	339	42	1	6.2 23.	
1-7-63 1445	1.1	46	14.3	120	810	8.1 / 8.1		6.96[g]	47 / 2.04		0 / 0.00	374 / 6.13		44 / 1.24			0.2			484[e]	23	348	41	1	0.045- 2.3	
2-5-63 1300	0.5	58	6.2	61	749	6.8 / 8.0		6.82[g]	34 / 1.48		0 / 0.00	377 / 6.18		27 / 0.76			0.2			447[e]	18	341	32	2	2.3 62.	
3-4-63 1415	25	57	10.2	99	204	7.6 / 7.9		1.68[g]	16 / 0.70		0 / 0.00	88 / 1.44		6.5 / 0.18			0.1			122[e]	29	84	12	140	6.2 6.2	
4-8-63 1440	12	59	11.0	110	295	8.1 / 7.9		2.52[g]	14 / 0.61		0 / 0.00	131 / 2.15		9.1 / 0.26			0.3			176[e]	19	126	19	70	230. 23.	
5-14-63 1530	50	61	10.8	110	289	8.1 / 8.0	28 / 1.40	12 / 0.96	14 / 0.61	2.2 / 0.06	0 / 0.00	131 / 2.15	30 / 0.62	8.0 / 0.23	3.2 / 0.05	0.4 / 0.02	0.1	12	As = 0.01 ABS = 0.0 PO_4 = 0.00	174[g]	20	118	11	50	1.3 2.3	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

TABLE D-2

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: NC ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by [1]
COYOTE CREEK NEAR MADRONE (STA. B2)																										
6-5-63 1515	90	58	10.5	103	294	8 / 8.2		2.40[c]	14 / 0.61		0 / 0.00	134 / 2.20		9.2 / 0.26			0.2			176[e]	20	120	10	45	62. 62.	USGS
7-1-63 1700	139	60	10.2	103	299	6.8 / 8.1		2.48[c]	14 / 0.61		0 / 0.00	138 / 2.26		10 / 0.28			0.1			179[e]	20	124	11	25	6.2 620.	
8-5-63 1215	92	65	10.7	114	310	8.0 / 8.3		2.68[c]	14 / 0.61		2 / 0.07	137 / 2.25		8.1 / 0.23			0.2			185[e]	19	134	18	2	62. 62	
9-5-63 1100	90	66	9.5	103	326	7.7 / 8.2	32 / 1.60	13 / 1.10	15 / 0.65	1.8 / 0.05	0 / 0.00	156 / 2.56	31 / 0.65	9.1 / 0.26	3.0 / 0.05	0.2 / 0.01	0.2	11	As = 0.00 ABS = 0.0 PO_4 = 0.00	207[g]	19	135	7	3	2.3 2.3	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by f
							equivalents per million																			
BRANCIFORTE CREEK NEAR SANTA CRUZ (STA. 209)																										
8/28/63 1240	1 (est.)	63			559	8.1 / 8.2	66 / 3.29	10 / 0.85	37 / 1.61	3.1 / 0.08	0 / 0.00	226 / 3.70	55 / 1.14	32 / 0.90	0.9 / 0.01	0.4 / 0.02	0.13	32	Color = 25 Fe = 0.01 ABS = 0.0 PO_4 = 0.67	390[g]	28	207	22	15		DWR
SAN LORENZO RIVER AT SANTA CRUZ (STA. 230)																										
8/28/63 1315	10 (est.)	70			376	8.3 / 8.2	40 / 2.00	11 / 0.88	21 / 0.91	2.3 / 0.06	0 / 0.00	141 / 2.31	42 / 0.87	21 / 0.59	0.4 / 0.01	0.2 / 0.01	0.10	24	Color = 10 Fe = 0.01 ABS = 0.0 PO_4 = 0.46	232[g]	24	144	28	0.3		DWR
SAN LORENZO RIVER AT BIG TREES NEAR FELTON (STA. 75)																										
8/28/63 1420	15 (est.)	73			377	7.8 / 8.1	46 / 2.30	5.4 / 0.44	22 / 0.96	2.2 / 0.06	0 / 0.00	141 / 2.31	38 / 0.79	21 / 0.59	0.5 / 0.01	0.3 / 0.02	0.09	26	Color = 10 Fe = 0.18 ABS = 0.0 PO_4 = 0.56	232[g]	26	137	21	1		DWR
SAN LORENZO RIVER AT BIG TREES NEAR FELTON (STA. 75)																										
10/3/62 1400	17	62	9.7	100	382	7.9 / 8.0		2.72[c]	27 / 1.17		0 / 0.00	141 / 2.31		28 / 0.79			0.4			242[e]	30	136	20	4	23. 5.	USGS
11-7-62 1320	27	56	11.4	109	399	7.8 / 8.0		2.96[c]	25 / 1.09		0 / 0.00	144 / 2.36		24 / 0.68			0.1			253[e]	27	148	30	1	6.2 2.3	
12-4-62 1810	27	51	9.7	87	382	7.6 / 7.6		2.70[c]	28 / 1.22		0 / 0.00	139 / 2.28		25 / 0.71			0.0			242[e]	31	135	21	2	23. 23.	
1-9-63 1410	35	48	11.8	102	401	7.6 / 8.0		3.00[c]	24 / 1.04		0 / 0.00	146 / 2.39		24 / 0.68			0.0			254[e]	26	150	30	5	6.2 6.4	
2-7-63 1145	275	56	10.3	99	316	7.4 / 7.7		2.42[c]	16 / 0.70		0 / 0.00	106 / 1.74		15 / 0.42			0.0			200[e]	22	121	34	15	230. 130.	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

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TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
SAN LORENZO RIVER AT BIG TREES NEAR FELTON (STA. 75)																										
3-6-63						7.4			18		0	129		16			0.1								2.3	
1320	154	48	11.4	99	357	8.2		2.76[c]	0.78		0.00	2.11		0.45											23.	USGS
4-10-63						7.5			13		0	92		10			0.1								620.	
1025	490	50	10.9	97	272	7.6		2.12[c]	0.57		0.00	1.51		0.28											620.	
5-16-63						7.8	40	8.3	18	1.9	0	128	49	15	0.7	0.3	0.0	26	PO_4 = 0.30						23.	
1500	145	62	9.6	99	345	8.1	2.00	0.68	0.78	0.05	0.00	2.10	1.02	0.42	0.01	0.02				232[g]	22	134	29	3	5.	
6-4-63						8			18		6	124		16			0.1								23.	
1600	85	64	9.2	97	352	8.6		2.76[c]	0.78		0.20	2.03		0.45						223[e]	22	138	26	5	2,400.	
7-2-63						7.8			18		0	137		19			0.0								62.	
1300	52	66	9.2	99	364	8.1		2.79[c]	0.78		0.00	2.25		0.54						230[e]	22	140	28	1	62.	
8-6-63						8.0			21		1	140		20			0.0								23.	
1610	37	68	9.6	106	365	8.3		2.87[c]	0.91		0.03	2.29		0.56						231[e]	24	143	26	1	23.	
9-5-63						7.7	44	7.8	22	2.0	0	146	36	22	2.8	0.3	0.1	25	As = 0.00						62.	
0830	32	61	9.0	92	375	7.9	2.20	0.64	0.96	0.05	0.00	2.39	0.75	0.62	0.05	0.02			ABS = 0.0 PO_4 = 0.15	249[g]	25	142	22	4	23.	
ZAYANTE CREEK AT FELTON (STA. 233)																										
8/29/63						8.1	45	7.3	24	1.8	0	132	48	24	1.2	0.3	0.10	32	Color = 10 Fe = 0.26							DWR
1545	4 (est.)	62			394	8.0	2.24	0.60	1.04	0.05	0.00	2.16	1.00	0.68	0.02	0.02			ABS = 0.0 PO_4 = 1.1	253[g]	26	142	34	1		
BEAN CREEK ONE MILE EAST OF FELTON (STA. 204)																										
8/30/63						8.0	43	6.1	24	1.6	0	119	47	27	1.8	0.3	0.09	36	Color = 10 FE = 0.28							DWR
1000	2 (est.)	58			383	7.9	2.14	0.50	1.04	0.04	0.00	1.95	0.98	0.76	0.03	0.02			ABS = 0.0 PO_4 = 1.2	249[g]	28	132	34	1		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 / 0.00 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

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ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen % of Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by
LOMPICO CREEK ONE MILE NORTH OF OLYMPIA (STA 215)																										
8/30/63 0915	0.5 (est.)	58			604	8.1 / 8.1	83 / 4.14	15 / 1.23	27 / 1.17	2.0 / 0.05	0 / 0.00	303 / 4.97	48 / 1.00	20 / 0.56	0.4 / 0.01	0.3 / 0.02	0.11	32	Color = 15; Fe = 0.10; ABS = 0.0; PO_4 = 0.70	388[R]	18	269	21	0.6		DWR
ZAYANTE CREEK AT ZAYANTE (STA 234)																										
8/30/63 0853	1 (est.)	59			628	8.2 / 8.3	77 / 3.84	15 / 1.27	36 / 1.57	2.6 / 0.07	0 / 0.00	232 / 3.80	104 / 2.16	25 / 0.70	0.4 / 0.01	0.5 / 0.03	0.13	26	Color = 10; Fe = 0.11; ABS = 0.0; PO_4 = 0.44	412[R]	23	256	66	0.1		DWR
SAN LORENZO RIVER AT FELTON (STA. 229)																										
8/29/63 1535	8 (est.)	66			379	8.0 / 7.9	48 / 2.40	6.3 / 0.52	20 / 0.87	2.3 / 0.06	0 / 0.00	146 / 2.39	40 / 0.83	22 / 0.62	0.7 / 0.01	0.2 / 0.01	0.09	23	Color = 10; Fe = 0.11; ABS = 0.0; PO_4 = 0.14	236[R]	22	146	26	0.9		DWR
FALL CREEK ONE-HALF MILE NORTH OF FELTON (STA. 211)																										
8/29/63 1520	2 (est.)	58			259	8.0 / 8.0	41 / 2.04	3.9 / 0.32	9.8 / 0.43	2.2 / 0.06	0 / 0.00	140 / 2.29	9.7 / 0.20	9.8 / 0.28	0.4 / 0.01	0.1 / 0.00	0.02	23	Color = 10; Fe = 0.02; ABS = 0.0; PO_4 = 0.09	167[R]	15	118	3	0.7		DWR
NEWELL CREEK ONE MILE NORTHEAST OF BEN LOMOND (STA 219)																										
8/29/63 1450		52			414	6.8 / 7.9	58 / 2.89	6.7 / 0.55	17 / 0.74	2.6 / 0.07	0 / 0.00	120 / 1.97	86 / 1.79	12 / 0.34	1.2 / 0.02	0.3 / 0.02	0.09	19	Color = 35; Fe = 0.37; ABS = 0.0; PO_4 = 0.33	276[R]	17	172	74	2		DWR

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 / 0.00 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

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TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chlorides (Cl)	Nitrate (NO_3)	Fluorides (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed By i
LOVE CREEK AT BEN LOMOND (STA. 216)																										
8/29/63 1330	0.25(est.)	63			388	7.8 / 8.0	48 / 2.40	7.5 / 0.62	21 / 0.91	1.8 / 0.05	0 / 0.00	152 / 2.49	38 / 0.79	23 / 0.65	0.6 / 0.01	0.3 / 0.02	0.10	33	Color = 10; Fe = 0.05; ABS = 0.0; PO_4 = 0.73	253[g]	23	151	26	0.7		DWR
CLEAR CREEK AT BROOKDALE (STA. 210)																										
8/29/63 1305	1 (est.)	58			181	7.4 / 7.7	21 / 1.05	4.0 / 0.33	11 / 0.48	2.2 / 0.06	0 / 0.00	92 / 1.51	4.8 / 0.10	8.8 / 0.25	0.4 / 0.01	0.1 / 0.00	0.04	23	Color = 5; Fe = 0.01; ABS = 0.0; PO_4 = 0.04	120[g]	25	69	0	0.3		DWR
BOULDER CREEK AT BOULDER CREEK (STA. 208)																										
8/29/63 1240	3 (est.)	60			204	7.9 / 7.9	22 / 1.10	5.4 / 0.44	13 / 0.56	2.1 / 0.05	0 / 0.00	95 / 1.56	9.0 / 0.19	12 / 0.34	0.8 / 0.01	0.1 / 0.00	0.04	23	Color = 10; Fe = 0.03; ABS = 0.0; PO_4 = 0.16	132[g]	26	77	0	0.6		DWR
BEAR CREEK AT BOULDER CREEK (STA. 205)																										
8/29/63 0910	2 (est.)	59			595	8.1 / 8.2	71 / 3.54	13 / 1.06	38 / 1.65	2.2 / 0.06	0 / 0.00	210 / 3.44	98 / 2.04	27 / 0.76	0.4 / 0.01	0.4 / 0.02	0.13	21	Color = 15; Fe = 0.06; ABS = 0.0; PO_4 = 0.27	383[g]	26	230	58	0.6		DWR
BEAR CREEK FOUR MILES NORTHEAST OF BOULDER CREEK (STA. 206)																										
8/29/63 1005	2 (est.)	58			634	8.0 / 8.2	77 / 3.84	16 / 1.35	33 / 1.44	2.3 / 0.06	0 / 0.00	230 / 3.77	110 / 2.29	24 / 0.68	0.5 / 0.01	0.4 / 0.02	0.15	20	Color = 20; Fe = 0.03; ABS = 0.0; PO_4 = 0.25	412[g]	22	260	71	0.5		DWR

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

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ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled PST	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH (a)	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ NC ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by (i)
SAN LORENZO RIVER AT BOULDER CREEK (STA. 232)																										
8/29/63 1830	3 (est.)	69			456	7.8 8.2	76 4.79	13 1.11	42 1.8	2.4 0.06	0 0.00	220 3.61	81 1.69	51 1.44	1.6 0.03	0.4 0.02	1.22	21	Color = 5 Fe = 0.11 ABS = 0.03 PO_4 = 0.08	404[e]	27	245	65	1		DWR
TWO BAR CREEK ONE MILE NORTH OF BOULDER CREEK (STA. 232)																										
8/29/63 1820	25 (est.)	65			374	— 7.9	52 2.59	12 0.97	28 1.09	2.9 0.07	0 0.00	157 2.57	104 2.16	5 0.99	0.2 0.01	0.4 0.02	0.18	25	Color = 10 Fe = 0.24 ABS = 0.06 PO_4 = 0.19	308[e]	16	178	49	2		DWR
REGAS CREEK TWO MILES NORTH OF BOULDER CREEK (STA. 231)																										
8/29/63 1810	1 (est.)	68			422	8.1	4 1.00	17 1.42	38 1.65	1.1 0.03	0 0.00	218 3.57	11 0.23	31 0.87	1.0 0.02	0.7 0.03	0.27	21	Color = 5 Fe = 0.11 ABS = 0.03 PO_4 = 0.28	402[e]	23	248	64	1		DWR
SAN LORENZO RIVER SIX MILES NORTH OF BOULDER CREEK (STA. 228)																										
8/29/63 1720	3 (est.)	66			352	8.3 8.4	50 2.49	9.1 0.75	23 1.00	1.2 0.03	0 0.00	178 2.92	9.4 0.20	14 0.39	1.0 0.02	0.4 0.02	0.17	24	Color = 10 Fe = 0.11 ABS = 0.03 PO_4 = 0.04	337[e]	16	252	40	1.4		DWR
SOQUEL CREEK AT SOQUEL (STA. 76)																										
10-4-62 1130	1.6	61	11.3	114	249	8.2 8.3			53 2.31		0 0.00	203 3.33		65 1.83			0.2			176[e]	27	135	89	1	23 0.2	USGS
11-6-62 1230	1.6	51	11.1	91	841	8.2 —			58 2.52		0 0.00	240 3.93		91 1.32			0.1			537[e]	28	327	120	2	0.2	
1-9-63 1100	8.2	50	11.1	93	853	8.3 8.5			0.2 2.76		2 0.07	238 3.92		94 1.81			0.1			544[e]	24	324	109	2	0.2	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr) reported here as 0.0 except as shown 0.00

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

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TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
							equivalents per million																			
SOQUEL CREEK AT SOQUEL (STA. 76)																										
1-4-63 1245	13	49	12.1	105	787	8.2 / 8.5		6.18[c]	52 / 2.26		15 / 0.50	218 / 3.57		53 / 1.50			0.1			502[e]	27	309	106	1	6.2 / 2.1	USGS
2-7-63 1645	115	58	10.7	104	535	7.8 / 8.1		4.44[c]	26 / 1.13		0 / 0.00	164 / 2.69		19 / 0.54			0.0			341[e]	20	222	88	50	62. / 62.	
3-6-63 1220	47	52	11.2	101	630	7.8 / 8.4		5.21[c]	10 / 1.30		4 / 0.13	200 / 3.28		25 / 0.71			0.1			402[e]	20	260	89	10	0.62 / 23.	
4-10-63 0940	250	50	11.1	98	338	7.7 / 7.8		2.96[c]	16 / 0.70		0 / 0.00	112 / 1.84		10 / 0.28			0.1			216[e]	19	148	56	600	2,400. / 2,400.	
5-16-63 1330	42	70	10.0	111	586	8.0 / 8.4	72 / 3.59	16 / 1.33	32 / 1.39	3.0 / 0.08	6 / 0.20	191 / 3.13	111 / 2.31	23 / 0.65	0.8 / 0.01	0.4 / 0.02	0.1	25	PO_4 = 0.20	396[g]	22	246	80	2	13. / 2.3	
6-4-63 1645	24	70	9.1	101	653	8. / 8.5		5.32[c]	37 / 1.61		13 / 0.43	205 / 3.36		31 / 0 87			0.1			417[e]	23	266	76	1	620. / 2.3	
7-2-63 1415	15	72	11.3	128	693	8 3 / 8.6		5.68[c]	42 / 1.83		16 / 0.53	204 / 3.34		42 / 1.18			0.1			442[e]	24	284	90	1	23. / 62.	
8-6-63 1520	7.8	75	8.2	96	748	8.2 / 8.4		6.02[c]	50 / 2.18		9 / 0.30	228 / 3.74		55 / 1.55			0.1			477[e]	27	301	100	1	62. / 23.	
9-5-63 1700	5.6	73	7.8	90	818	8.2 / 8.4	80 / 3.99	23 / 1.91	52 / 2.26	5.2 / 0.13	10 / 0.33	232 / 3.80	99 / 2.06	62 / 1.75	2.4 / 0.04	0.4 / 0.02	0.2	33	As = 0.00 ABS = 0.0 PO_4 = 0.10	509[g]	27	295	88	3	6.2 / 23.	
PAJARO RIVER NEAR CHITTENDEN (STA. 77)																										
10-1-62 1700	0.5	67	8.0	86	2,060	8.2 / 8.0		9.58[c]	288 / 12.53		0 / 0.00	584 / 9.57		375 / 10.58			0.1			1,288[e]	57	479	0	15	130. / 620.	USGS
11-5-62 1725	1.0	59	7.6	75	1,830	8.2 / 8.3		8.32[c]	258 / 11.22		12 / 0.40	520 / 8.52		289 / 8.15			1.6			1,144[e]	57	416	0	2	62 / 23.	
12-3-62 1245	0.7	55	9.1	86	2,060	7.5 / 8.4		9.50[c]	284 / 12.35		12 / 0.40	578 / 9.47		332 / 9.37			1.8			1,288[e]	57	475	0	1	62. / 2.3	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 / 0.00 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc (TTL), or California Department of Water Resources (DWR); as indicated.

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by
PAJARO RIVER NEAR CHITTENDEN (STA. 77)																										
1-7-63						8.0			268		12	548		338			1.9								23.	USGS
1710	1.5	47	9.0	76	2,030	8.3		9.60[c]	11.66		0.40	8.98		9.53						1,269[e]	55	480	11	2	23.	
2-5-63						7.4			15		0	106		12			0.0								620.	
1445	1,200	60	8.2	82	262	7.3		2.04[c]	0.65		0.00	1.74		0.34						1,638[e]	24	102	15	240	7,000.	
3-4-63						7.5			34		0	204		33			0.3								130.	
1600	46	59	9.6	95	591	8.2		4.64[c]	1.48		0.00	3.34		0.93						369[e]	24	232	65	25	230.	
4-8-63						7.5			18		0	142		13			0.2								620.	
1610	1,100	60	8.6	86	334	7.7		2.83[c]	0.78		0.00	2.33		0.37						209[e]	22	142	26	200	230.	
5-15-63						7.9	67	42	54	2.2	13	249	138	48	10	0.3	0.3	19	As = 0.00						6.2	
0900	57	62	8.8	90	847	8.4	3.34	3.48	2.35	0.06	0.43	4.08	2.87	1.35	0.16	0.02			ABS = 0.1 PO_4 = 1.4	519[g]	25	341	115	60	23.	
6-5-63						8.			100		12	352		94			0.7								230.	
1330	29	68	8.5	93	1,280	8.4		9.99[c]	4.35		0.40	5.77		2.65						800[e]	30	500	192	20	21.	
7-1-63						8.0			122		8	408		112			0.8								6.2	
1815	14	70	7.6	85	1,500	8.4		10.40[c]	5.31		0.27	6.69		3.16						938[e]	34	520	172	9	130.	
8-5-63						8.1			142		7	505		125			0.8								62.	
1350	8.0	69	9.1	100	1,510	8.4		10.25[c]	6.18		0.23	8.28		3.53						944[e]	38	512	86	5	23.	
9-5-63						8.1	73	72	151	5.6	4	543	165	130	2.5	0.5	0.9	21	As = 0.02						62.	
1315	3.0	68	9.1	99	1,440	8.4	3.64	5.94	6.57	0.14	0.13	8.90	3.44	3.67	0.04	0.03			ABS = 0.0 PO_4 = 0.00	894[g]	40	479	28	9	5.	
SAN BENITO RIVER NEAR BEAR VALLEY FIRE STATION (STA. 77a)																										
10-2-62						7.9			274		0	554		260			1.7								620.	USGS
1005	0.2	63	9.2	98	2,120	8.2		12.94[c]	11.92		0.00	9.08		7.33						1,361[e]	48	647	193	5	2.3	
11-6-62						8.2			270		18	564		186			2.0								6.2	
0915	0.1	56	10.9	107	2,180	8.4		13.64[c]	11.74		0.60	9.24		5.25						1,413[e]	46	682	190	2	0.62	
12-3-62						8.2			224		35	482		143			1.6								23.	
1415	1.0	65	12.0	131	1,860	8.7		12.00[c]	9.74		1.17	7.90		4.03						1,205[e]	45	600	146	1	6.2	

a Field pH.

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled PST	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfates (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: NC ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by
SAN BENITO RIVER NEAR BEAR VALLEY FIRE STATION (STA. 77a)																										
1-8-63						8.4			200		22	530		149			1.6								2.3	USGS
1030	0.6	49	12.4	112	1,850	8.4		12.30[d]	8.70		0.73	8.69		4.20						1,199[e]	41	618	147	2	23.	
2-5-63						8.2			132		23	498		85			1.4								62.	
1610	5.0	64	9.2	99	1,430	8.5		10.52[d]	5.74		0.77	8.16		2.40						927[e]	35	526	80	40	620.	
3-5-63						8.4			166		40	501		104			1.5								0.23	
1100	4.0	58	11.6	117	1,660	8.7		11.92[d]	7.22		1.33	8.21		2.93						1,076[e]	38	596	119	2	6.2	
4-9-63						8.4			153		38	502		94			1.5								130.	
1005	6.0	55	10.8	105	1,540	8.8		12.04[d]	6.66		1.27	8.23		2.65						998[e]	36	602	126	10	23.	
5-15-63						8.4	31	68	39	2.7	12	396	72	18	1.6	0.3	0.4	12	PO_4 = 0.10						62.	
1000	3.2	67	8.8	98	758	8.4	1.55	5.61	1.70	0.07	0.40	6.49	1.50	0.51	0.03	0.02				442[g]	19	358	14	50	13.	
6-5-63						8			41		45	392		22			0.6								14.	
1220	107	72	8.9	105	813	8.9		8.16[d]	1.78		1.50	6.42		0.62						527[e]	18	408	11	40	5.	
7-1-63						8.4			186		35	475		118			1.7								130.	
2000	0.4	71	8.8	102	1,740	8.7		11.32[d]	8.09		1.17	7.79		3.33						1,128[e]	42	566	117	1	13.	
8-6-63						8.1			248		24	488		162			2.2								2.3	
1140	0.2	77	12.7	157	1,990	8.5		11.92[d]	10.79		0.80	8.00		4.57						1,290[e]	48	596	156	1	620.	
9-4-63						8.3	42	120	248	4.1	15	513	462	163	1.6	0.4	2.1	15	As = 0.00 ABS = 0.0 PO_4 = 0.00						6.2	
1315	0.1	69	12.1	138	2,110	8.3	2.10	9.86	10.79	0.10	0.50	8.41	9.62	4.60	0.03	0.02				1,310[g]	47	598	153	1	62.	
IVAS CREEK NEAR MORGAN HILL (STA. 96)																										
10-1-62						8.2			12		4	192		8.8			0.0								620.	USGS
1540	3 (est.)	80	11.2	140	354	8.3		3.48[d]	0.52		0.13	3.15		0.25						216[e]	13	174	10	1	5	
11-5-62						7.3			7.0		0	101		5.2			0.1								62.	
1610	125 (est.)	59	9.2	92	207	7.8		1.94[d]	0.30		0.00	1.66		0.15						126[e]	13	97	14	20	6.2	
12-3-62						7.6			8.7		0	149		6.5			0.0								2.3	
1145	15 (est.)	55	11.2	106	283	8.2		2.62[d]	0.38		0.00	2.44		0.18						173[e]	13	131	9	30	2.3	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc (TTL), or California Department of Water Resources (DWR), as indicated.

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N C ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by f
UVAS CREEK NEAR MORGAN HILL (STA. 96)																										
1-7-63 1000	1 (est.)	54	16.5	154	339	8.2 / 8.5		3.26[c]	11 / 0.48		14 / 0.47	158 / 2.59		7.2 / 0.20			0.1			207[e]	13	163	10	2	2.3 / 2.3	USGS
2-5-63 1345	300(est.)	58	10.3	101	176	7.5 / 7.7		1.52[c]	6.0 / 0.26		0 / 0.00	90 / 1.48		3.8 / 0.11			0.0			107[e]	15	76	2	90	230 / 23.	
3-4-63 1500	10(est.)	58	10.8	106	204	7.6 / 8.0		1.84[c]	5.9 / 0.26		0 / 0.00	107 / 1.75		4.0 / 0.11			0.0			124[e]	12	92	4	60	1.3 / 6.2	
4-8-63 1520	500(est.)	59	9.7	97	224	7.7 / 7.8		2.06[c]	6.2 / 0.27		0 / 0.00	118 / 1.93		5.8 / 0.16			0.0			137[e]	12	103	6	15	6.2 / 62.	
5-14-63 1600	8 (est.)	70	11.4	125	275	8.3 / 8.3	29 / 1.45	13 / 1.11	8.5 / 0.37	1.2 / 0.03	6 / 0.20	138 / 2.26	18 / 0.37	5.5 / 0.16	1.6 / 0.03	0.2 / 0.01	0.0	19	PO_4 = 0.05	166[g]	12	128	5	2	0.62 / 0.62	
6-5-63 1430	5 (est.)	70	10.5	119	307	8 / 8.6		2.93[c]	9.0 / 0.39		8 / 0.27	152 / 2.49		6.1 / 0.17			0.1			187[e]	12	146	8	5	6.2 / 2.3	
7-1-63 1730	10 (est.)	63	11.0	115	291	8.1 / 8.5		2.97[c]	8.5 / 0.37		6 / 0.20	145 / 2.38		6.0 / 0.17			0.0			178[e]	11	148	20	1	2.3 / 23.	
8-5-63 1300	30 (est.)	74	9.6	113	332	8.0 / 7.8		3.04[c]	10 / 0.44		0 / 0.00	178 / 2.92		5.2 / 0.15			0.2			203[e]	13	152	6	5	230. / 230.	
9-5-63 1200	25 (est.)	74	8.7	102	350	7.7 / 8.2	37 / 1.85	17 / 1.40	11 / 0.48	1.3 / 0.03	0 / 0.00	184 / 3.02	25 / 0.52	6.0 / 0.17	2.5 / 0.04	0.3 / 0.02	0.2	23	AS = 0.02 ABS = 0.0 PO_4 = 0.00	214[g]	13	162	11	15	.62 / 6.2	
GABILAN CREEK AT OLD STAGE ROAD NEAR SALINAS (STA. 212)																										
2-1-63 1430		61			359	7.8	40 / 2.00	8.8 / 0.72	19 / 0.83	3.5 / 0.09	0 / 0.00	130 / 2.13	30 / 0.62	26 / 0.73	7.5 / 0.12	0.2 / 0.01	0.0	21		235[g]	23	136	29	90		USGS

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated

TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P S T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in ppm: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: NC ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by f
														equivalents per million												
NATIVIDAD CREEK AT OLD STAGE ROAD NEAR SALINAS (STA 218)																										
2-11-63 1030		64 5			663	7 7	69 / 3 44	36 / 2 96	25 / 1.09	8 9 / 0 23	0 / 0.00	410 / 6.72	27 / 0.56	6.0 / 0.17	2 0 / 0 03	0 4 / 0.02	0.2	24		432[g]	14	320	0	2		USGS
ALISAL CREEK AT OLD STAGE ROAD NEAR SALINAS (STA. 200)																										
2-4-63 1000		60			821	8 5	79 / 3 94	26 / 2.14	58 / 2.52	2 2 / 0.06	12 / 0.40	262 / 4 29	56 / 1 17	89 / 2.51	8 4 / 0.14	0 7 / 0.04	0.0	28		506[g]	29	304	69	3		USGS
TORO CREEK AT HIGHWAY 117 BRIDGE NEAR SALINAS (STA 237)																										
2-4-63 1600		62			1,330	8 5	88 / 4.39	29 / 2.39	138 / 6.00	4 2 / 0.11	10 / 0.33	226 / 3.70	113 / 2.35	220 / 6.21	2 1 / 0 03	0 4 / 0.02	0.1	72		831[g]	47	339	137	2		USGS
SALINAS RIVER NEAR SPRECKELS (STA. 43)																										
10-3-62 1040	0.6	60	10.8	108	1,110	7.3 / 7.4		4.63[c]	140 / 6.09		0 / 0.00	302 / 4 95		150 / 4.23			0 9			673[e]	57	232	0	20	7,000.+ / 7,000.+	USGS
11-7-62 1050	3 0	57	6.3	60	1,530	7 4 / 8.0		10.16[c]	135 / 5.87		0 / 0.00	700 / 11.47		35 / 0.99			0.2			927[e]	37	508	0	5	230. / 62.	
12-4-62 1530	5.0	61	2.0	20	1,500	7.4 / 7 8		9 92[c]	121 / 5.26		0 / 0.00	675 / 11.06		143 / 4.03			0.3			909[e]	35	496	0	2	230. / 230.	
1-9-63 1130	5.0	52	4.0	36	1,600	7.5 / 7 8		11 40[c]	120 / 5 22		0 / 0.00	770 / 12 62		146 / 4.12			0.1			970[e]	31	570	0	5	130. / 23.	
2-6-63 1700	1,280	62	9 9	101	389	7 9 / 8.1		3.06[c]	20 / 0.87		0 / 0.00	142 / 2.33		15 / 0.42			0 0			236[e]	22	153	37	60	210. / 230.	
3-6-63 0920	210	51	11.2	100	650	8 1 / 8.4		5.16[c]	38 / 1 65		13 / 0.43	204 / 3.34		33 / 0 93			0 2			394[e]	24	258	69	50	2.3 / 23.	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0 0 / 0 00 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO.3)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: Non-Carb ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by f
SALINAS RIVER NEAR SPRECKELS (STA. 43)																										
4-9-63 1720	540	63	9.5	98	490	7.9 / 8.3		4.10[c]	26 / 1.13		6 / 0.20	165 / 2.70		21 / 0.59			0.1		As = 0.00	297[e]	22	205	61	50	62. 62.	USGS
5-16-63 1200	120	73	12.1	139	715	8.4 / 8.6	77 / 3.84	23 / 1.91	44 / 1.91	3.0 / 0.08	14 / 0.47	216 / 3.54	129 / 2.69	38 / 1.07	3.1 / 0.05	0.4 / 0.02	0.1	23	ABS = 0.0 PO_4 = 0.00	460[g]	25	288	88	10	13. 62.	
6-4-63 1630	3.5	70	18.9	210	1,090	8. 8.5		5.91[c]	114 / 4.96		12 / 0.40	308 / 5.05		126 / 3.55			0.4			661[e]	46	296	24	15	230. 62.	
7-2-63 1530	2.0	78	18.1	218	1,330	8.1 / 8.0		5.92[c]	144 / 6.26		0 / 0.00	222 / 3.64		128 / 3.61			0.6			806[e]	56	296	114	15	2400. 620.	
8-6-63 1315	1.4	77	16.0	191	1,350	8.0 / 7.6		7.12[c]	139 / 6.05		0 / 0.00	450 / 7.38		144 / 4.06			0.4			818[e]	46	356	0	6	2,400. 2,400.	
9-5-63 1415	3.3	74	9.5	110	1,440	7.7 / 8.0	107 / 5.34	47 / 3.90	130 / 5.66	35 / 0.89	0 / 0.00	598 / 9.80	45 / 0.94	147 / 4.15	2.0 / 0.32	0.5 / 0.03	0.3	40	As = 0.00 ABS = 1.5 PO_4 = 13	894[g]	36	462	0	40	620. 620.	
SALINAS RIVER AT HILLTOWN BRIDGE NEAR SPRECKELS (STA. 222)																										
2-4-63 1530		60			296	— / 7.5	32 / 1.60	8.8 / 0.72	13 / 0.57	2.9 / 0.07	0 / 0.00	109 / 1.79	40 / 0.83	9.8 / 0.28	3.4 / 0.05	0.1 / 0.01	0.0	22		188[g]	19	116	27	100		USGS
SALINAS RIVER AT CHUALAR BRIDGE NEAR CHUALAR (STA. 221)																										
2-4-63 1430		61.5			304	— / 8.4	32 / 1.60	9.5 / 0.78	15 / 0.65	2.9 / 0.07	3 / 0.10	105 / 1.72	46 / 0.96	10 / 0.28	3.5 / 0.06	0.1 / 0.01	0.1	29		200[g]	21	119	28	110		USGS

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

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TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled PST	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ NC ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by f
ARROYO SECO RIVER NEAR SOLEDAD (STA. 203)																										
2-4-63 1200		50			253	8.2	30 / 1.5	7.3 / 0.60	9.7 / 0.42	2.6 / 0.07	0 / 0.00	99 / 1.62	37 / 0.77	3.5 / 0.10	1.1 / 0.02	0.1 / 0.01	0.0	22		168[g]	16	105	24	20		USGS
SALINAS RIVER AT SAN LUCAS BRIDGE NEAR SAN LUCAS (STA. 224)																										
2-4-63 1500		61			406	8.4	42 / 2.10	14 / 1.16	21 / 0.91	2.4 / 0.07	2 / 0.07	142 / 2.33	63 / 1.31	16 / 0.45	2.8 / 0.05	0.1 / 0.01	0.0	26		270[g]	21	164	44	30		USGS
SALINAS RIVER AT SAN ARDO BRIDGE NEAR SAN ARDO (STA. 223)																										
2-4-63 1500		61			403	8.4	42 / 2.10	14 / 1.18	20 / 0.87	2.8 / 0.07	4 / 0.13	144 / 2.36	58 / 1.21	16 / 0.45	2.2 / 0.04	0.1 / 0.01	0.1	25		268[g]	21	164	39	40		USGS
PANCHO RICO CREEK NEAR SAN ARDO (STA. 220)																										
2-28-63 1430					3,550	8.3	285 / 14.22	142 / 11.70	400 / 17.40	12 / 0.31	8 / 0.13	198 / 3.25	1,650 / 34.35	144 / 4.06	10 / 0.16	1.1 / 0.05	1.3	28		3,160[b]	40	1,300	1,130	120		USGS
SALINAS RIVER NEAR BRADLEY (STA. 43c)																										
10-2-62 1215	470	68	9.4	104	270	8.1 / 8.2		2.32[c]	11 / 0.48		0 / 0.00	119 / 1.95		13 / 0.37			0.5			173[e]	17	116	18	15	23. / 23.	USGS
11-6-62 1200	244	62	9.7	101	300	7.9 / 7.9		2.60[c]	12 / 0.52		0 / 0.00	143 / 2.34		8.2 / 0.23			0.1			192[e]	17	130	13	5	6.2 / 2.3	
12-3-62 1600	260	60	9.9	100	314	7.8 / 8.0		2.67[c]	13 / 0.57		0 / 0.00	145 / 2.38		9.1 / 0.26			0.1			201[e]	18	133	14	2	2.3 / 6.2	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 / 0.00 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

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ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled PST	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by f
SALINAS RIVER NEAR BRADLEY (STA. 43c)																										
1-8-63 1230	14	52	14.3	132	673	8.3 / 8.5		5.19[c]	47 / 2.04		10 / 0.33	212 / 3.47		46 / 1.02			0.1			431[e]	28	219	69	3	2.3 / 0.62	USGS
2-6-63 1100	460	58	10.0	99	451	8.0 / 8.1		3.68[c]	23 / 1.00		0 / 0.00	122 / 2.82		16 / 0.45			0.1			289[e]	21	184	43	20	62. / 230.	
3-5-63 1400	150	60	11.4	116	599	8.2 / 8.5		4.68[c]	36 / 1.57		11 / 0.37	202 / 3.31		26 / 0.73			0.2			383[e]	25	234	50	6	2.3 / 6.2	
4-9-63 1210	331	61	9.8	101	509	8.1 / 8.3		4.24[c]	30 / 1.30		7 / 0.23	192 / 3.15		19 / 0.54			0.1			326[e]	23	212	43	35	2,400. / 230.	
5-15-63 1330	200	74	7.0	83	587	8.3 / 8.5	62 / 3.09	21 / 1.71	37 / 1.61	2.2 / 0.06	10 / 0.33	212 / 3.47	96 / 2.00	24 / 0.68	0.6 / 0.01	1.4 / 0.02	0.1	28	PO_4 = 0.30	401[e]	25	240	50	1	0.23 / 5.	
6-4-63 1030	70	73	6.8	80	629	8. / 8.2		4.88[c]	42 / 1.83		0 / 0.00	234 / 3.84		25 / 0.71			0.1			403[e]	27	244	52	5	23. / 6.2	
7-2-63 2230	440	58	8.5	84	304	8.3 / 8.3		2.54[c]	13 / 0.57		2 / 0.07	131 / 2.1		8.2 / 0.23			0.0			195[e]	18	127	16	6	230. / 2.3	
8-6-63 0950	534	64	10.4	111	281	8.2 / 7.7		2.44[c]	11 / 0.48		0 / 0.00	134 / 2.20		6.7 / 0.18			0.1			180[e]	16	122	12	6	6.2 / 230.	
9-4-63 1025	500	59	9.4	94	275	7.8 / 8.1	27 / 1.35	13 / 1.03	10 / 0.44	1.4 / 0.04	0 / 0.00	129 / 2.11	28 / 0.58	6.0 / 0.17	0.2 / 0.00	0.1 / 0.01	0.0	14	As = 0.04 ABS = 0.0 PO_4 = 0.10	177[g]	15	119	13	10	13. / 6.2	
SAN ANTONIO RIVER AT PLEYTO BRIDGE NEAR PLEYTO (STA. 225)																										
2-4-63 1400		61			305	/ 8.2	38 / 1.90	10 / 0.84	11 / 0.48	2.6 / 0.07	0 / 0.00	134 / 2.18	44 / 0.92	6.8 / 0.19	1.7 / 0.01	0.0 / 0.00	0.0	34		218[g]	15	137	28	30		USGS

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

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TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N C ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by l
											equivalents per million															
SAN ANTONIO RIVER NEAR FLETTO (STA. 43d)																										
10-2-62 1315	Dry																									USGS
11-6-62 1250	Ponded																									
12-3-62 1645	0.3	61	9.6	99	488	7.5 / 8.2		4.02[c]	30 / 1.30		0 / 0.00	204 / 3.34		19 / 0.54			0.0			316[e]	24	201	34	2	2.3 / 6.2	
1-8-63 1330	8.9	55	10.5	100	466	8.0 / 8.2		4.04[c]	20 / 0.87		0 / 0.00	194 / 3.18		16 / 0.45			0.0			302[e]	18	202	43	3	0.62 / 23.	
2-6-63 1200	300	59	9.9	99	332	7.7 / 8.1		2.96[c]	12 / .52		0 / 0.00	144 / 2.36		7.5 / .21			0.1			215[e]	15	148	30	5	62. / 62.	
3-5-63 1430	122	61	9.6	99	385	8.0 / 8.4		3.38[c]	13 / 0.57		5 / 0.17	158 / 2.59		7.8 / 0.22			0.0			249[e]	14	169	31	4	0.62 / 0.62	
4-9-63 1250	200	62	9.4	98	340	7.9 / 8.1		3.13[c]	11 / 0.48		0 / 0.00	148 / 2.43		6.0 / 0.17			0.1			220[e]	13	156	35	10	6.2 / 6.2	
5-15-63 1415	105	78	8.0	98	379	8.0 / 8.3	47 / 2.35	13 / 1.05	15 / 0.65	1.8 / 0.05	4 / 0.13	160 / 2.62	55 / 1.15	7.5 / 0.21	1.2 / 0.02	0.4 / 0.02	0.0	28	PO_4 = 0.20	261[g]	16	170	32	6	6.2 / 2.3	
6-4-63 1100	50	75	7.8	93	404	8. / 8.6		3.72[c]	15 / 0.65		10 / 0.33	160 / 2.62		8.8 / 0.25			0.0			261[e]	15	186	38	5	2.3 / 2.3	
7-2-63 2200	16	65	8.2	88	427	8.2 / 8.4		3.80[c]	17 / 0.74		6 / 0.20	168 / 2.75		10 / 0.28			0.0			276[e]	16	190	42	1	62. / 6.2	
8-6-63 0920	Ponded																									
9-4-63 0945	Dry																									

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 / 0.00 except as shown

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g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

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32505-DH 6-63 200 JP0

Date and time sampled P S T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N C ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by i
							equivalents per million																			
NACIMIENTO RIVER NEAR SAN MIGUEL (STA. 43b)																										
10-2-62 1345	500(est.)	67	13.4	147	228	8.2 / 7.9		2.21[c]	8.1 / 0.35		0 / 0.00	123 / 2.02		6.4 / 0.18			0.2			138[e]	14	110	9	15	62. 62.	USGS
11-6-62 1330	255	65	10.4	112	261	7.9 / 7.9		2.32[c]	8.6 / 0.37		0 / 0.00	132 / 2.16		5.8 / 0.16			0.0			158[e]	14	116	8	3	23. 62.	
12-3-62 1800	200(est.)	60	9.8	100	272	8.0 / 7.9		2.40[c]	9.4 / 0.41		0 / 0.00	130 / 2.13		6.9 / 0.19			0.0			164[e]	15	120	13	2	23. 23.	
1-8-63 1415	4(est.)	54	8.7	82	349	7.4 / 8.3		3.15[c]	12 / 0.52		3 / 0.10	177 / 2.90		11 / 0.31			0.0			211[e]	14	157	6	5	13. 23.	
2-6-63 1255	5(est.)	62	9.9	103	346	7.8 / 7.8		3.16[c]	11 / 0.48		0 / 0.00	174 / 2.85		8.2 / 0.23			0.1			209[e]	13	158	15	7	62. 230.	
3-5-63 1500	2(est.)	64	10.8	115	364	8.0 / 8.1		3.32[c]	11 / 0.48		0 / 0.00	182 / 2.98		8.8 / 0.25			0.1			220[e]	13	166	17	6	0.21 0.62	
4-9-63 1400	No flow																									
5-15-63 1530	Ponded																									
6-4-63 1130	Ponded																									
7-2-63 2120	500(est.)	58	11.1	110	258	8.2 / 8.2		2.32[c]	7.9 / 0.34		0 / 0.00	120 / 1.97		6.0 / 0.17			0.0			156[e]	13	116	18	5	23. 23.	
8-6-63 0830	500 (est.)	55	11.1	106	260	7.5 / 8.0		2.32[c]	7.8 / 0.34		0 / 0.00	123 / 2.02		6.0 / 0.17			0.1			157[e]	13	116	15	5	62. 23.	
9-4-63 0815	500(est.)	54	9.8	92.5	259	7.2 / 7.9	26 / 1.30	12 / 1.02	7.8 / 0.34	2.0 / 0.05	0 / 0.00	122 / 2.00	21 / 0.44	5.8 / 0.16	1.2 / 0.02	0.2 / 0.01	0.0	13	As = 0.00 ABS = 0.0 PO_4 = 0.10	157[g]	13	116	16	4	2.1 23.	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination

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TABLE D-2

ANALYSES OF SURFACE WATER

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH a / b	Mineral constituents in ppm / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N C ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by i
												NACIMIENTO LAKE AT DAM NEAR SAN MIGUEL (STA. 247)														
2-xx-63 1400		66			148	8.4	14 / 0.70	6.6 / 0.54	5.2 / 0.23	2.0 / 0.05	0 / 0.00	62 / 1.02	15 / 0.31	3.8 / 0.11	4.1 / 0.07	0.0 / 0.00	0.0	11		101[k]	15	62	11	35		USGS
												SALINAS RIVER AT PASO ROBLES (STA. 43a)														
10-2-62 1530	Dry																									
11-6-62 1430	Dry																									
12-4-62 0900	Dry																									
1-8-63 1500	Dry																									
2-6-63 1350	33	62	9.2	96	628	7.7 / 8.1		5.58c	28 / 1.22		0 / 0.00	236 / 3.87		26 / 0.73			0.2			412[e]	18	279	85	4	620. / 23.	
3-5-63 1620	38	63	10.4	109	783	8.1 / 8.4		6.76c	41 / 1.78		12 / 0.40	258 / 4.23		36 / 1.02			0.2			514[e]	21	338	107	1	23. / 62.	
4-9-63 1430	130	66	8.9	97	610	7.9 / 8.4		5.49c	26 / 1.13		0 / 0.00	246 / 4.03		23 / 0.65			0.1			400[e]	17	274	72	25	23. / 230.	
5-15-63 1615	65	82	8.6	110	691	8.1 / 8.9	82 / 4.09	28 / 2.31	32 / 1.39	1.7 / 0.04	10 / 0.33	258 / 4.23	116 / 2.42	29 / 0.82	1.0 / 0.02	0.2 / 0.01	0.0	20	PO_4 = 0.25	454[k]	18	320	92	2	190. / 5.	
6-4-63 1300	15	80	8.7	109	870	8.4 / 8.4		7.40c	52 / 2.26		12 / 0.40	287 / 4.70		49 / 1.38			0.1			571[e]	23	370	114	3	620. / 2,400.	
-2-63 2030	Dry																									
8-6-63 0730	Dry																									
9-4-63 0730	Dry																									

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as 0.0 / 0.00 except as shown

e Derived from conductivity vs TDS curves

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g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

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ANALYSES OF SURFACE WATER

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Date and time sampled PST	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH [a] / [b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform [h] MPN/ml	Analyzed by [i]
CARMEL RIVER AT ROBLES DEL RIO (STA. 83)																										
10-3-62 0900	[c]																									
11-[illegible]-62 0940	2.8	57	10.8	105	454	7.4 / 8.1		4.94	34 / 1.474		0 / 0.00	160 / 2.62		24 / 0.68			0.10			280 [e]	31	163	37	1	11. 6.2	
12-4-62 1440	4.8	56	11.8	113	340	7.8 / 8.2		3.86 [c]	41 / 1.78		0 / 0.00	174 / 2.84		36 / 1.02			0.10			331 [e]	32	190	48	1	21. 6.2	
1-9-63 1040	2.0	50	11.1	99	414	7.4 / 8.3		3.96	28 / 1.22		0 / 0.00	146 / 2.39		26 / 0.73			0.10			235 [e]	29	148	28	1	2.3 0.62	
2-7-63 0845	250	55	10.4	99	183	7.4 / 7.6		1.32 [c]	9.4 / 0.41		0 / 0.00	78 / 1.28		8.0 / 0.23			0.10			114 [e]	24	68	4	2	13. 6.2	
3-6-63 1015	95	52	11.2	102	259	7.6 / 8.1		1.86 [c]	12 / 0.52		0 / 0.00	102 / 1.67		10 / 0.28			0.10			147 [e]	27	92	8	3	1.3 6.2	
4-4-63 1810	240	54	10.4	97	213	7.9 / 8.1		1.76 [c]	10 / 0.44		0 / 0.00	98 / 1.61		5.3 / 0.14			0.10			135 [e]	21	83	5	1	23. 5.	
5-16-63 1100	132	62	10.0	103	242	7.8 / 8.0	.24 / 1.20	8.11 / 0.66	13 / 0.57	5.7 / 0.146	0 / 0.00	106 / 1.74	.24 / 0.40	9.8 / 0.28	1.2 / 0.02	0.3 / 0.03	0.10	.24	[f] .24 .19	158 [e]	23	93	6	2	0.62 2.1	
6-4-63 1600	160	60	8.8	89	223	8.0 / 8.4		1.96 [c]	11 / 0.48		4 / 0.13	102 / 1.67		8.4 / 0.24			0.10			139 [e]	20	97	7	3	23. 24.	
7-2-63 1610	23	70	10.5	119	293	8.2 / 8.7		2.28 [c]	16 / 0.70		0 / 0.00	146 / 2.39		12 / 0.34			0.10			182 [e]	23	114	11	1	6.2 2.3	
8-6-63 1345	0.7	74	10.6	125	358	8.1 / 8.4		2.68 [c]	23 / 1.00		5 / 0.17	127 / 2.08		18 / 0.51			0.10			221 [e]	27	134	22	1	24. 23.	
9-5-63 1515	[dry]																									

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

TABLE D-2

ANALYSES OF SURFACE WATER

SOUTH BAY AQUEDUCT

Date and time sampled P.S.T.	Water Elevation (feet)	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							BETHANY FOREBAY AT SOUTH BAY PUMPING PLANT (STA. 207)																			
10-8-62					588	7.9	28	14	64	3.1	0	115	41	95	2.0	0.2	0.23	16		349	51	129	35			DWR
2020							1.40	1.18	2.78	0.08	0.00	1.88	0.85	2.68	0.03	0.01										
11-1-62	237.5				710	7.9	33	17	81	3.5	0	125	57	119	2.0	0.2	0.30	19		424	53	154	52			
1550							1.65	1.43	3.52	0.09	0.00	2.05	1.19	3.36	0.03	0.01										
11-19-62	237.7				797	8.0	35	20	94	3.6	0	134		134			0.38			489	54	170	60			
1300							1.75	1.65	4.09	0.09	0.00	2.20		3.78												
12-9-62	239.13				788	7.8	38	18	89	3.6	0	133	67	130	3.5	0.3	0.37	20		443	53	168	59			
1915							1.90	1.46	3.87	0.09	0.00	2.18	1.39	3.67	0.06	0.02										
12-24-62	237.42				787		38	18	92	3.6			68	133		0.2	0.41		Al=0.78 Mn=0.00 As=0.00 Zn=0.01 Cu=0.00 Se=0.000 Pb=0.00 Fe=1.4	471	53	170				
1350							1.90	1.50	4.00	0.09			1.42	3.75		0.01										
1-7-63	237.31				789	8.1	35	20	96	5.0	0	137	68	132	2.6	0.3	0.40	19		480	54	169	57			
0910							1.75	1.63	4.18	0.13	0.00	2.24	1.42	3.72	0.04	0.02										
1-21-63	230.30				835	7.8	42	17	98	3.5	0	136	82	139	2.2	0.1	0.46	18		488	54	175	63			
1255							2.10	1.40	4.26	0.09	0.00	2.23	1.71	3.92	0.04	0.00										
2-4-63	238.66				852	7.9	40	20	98	3.3	0	137	89	136	3.3	0.2	0.48	18		487	54	181	69			
0930							2.00	1.62	4.26	0.08	0.00	2.24	1.85	3.84	0.05	0.01										
2-18-63	238.12				849	8.1	39	20	104	3.5	0	137	89	140	4.2	0.4	0.49	18	ABS=0.00	509	55	182	70			
1350							1.95	1.69	4.52	0.09	0.00	2.24	1.85	3.95	0.07	0.02										
3-1-63	238.51				805	7.8	32	20	99	3.2	0	120	89	133	0.8	0.1	0.48	17	ABS=0.0	396	57	161	63			
1315							1.60	1.62	4.31	0.08	0.00	1.97	1.85	3.75	0.01	0.00										
3-18-63	238.84				720	7.7	32	18	82	3.0	0	116	83	110	0.9	0.1	0.46	15	ABS=0.0	374	53	153	58			
1420							1.60	1.46	3.57	0.08	0.00	1.90	1.73	3.10	0.01	0.00										
4-1-63					773	7.8	33	20	88	3.0	0	111	88	119	2.7	0.2	0.44	17	ABS=0.0	477	53	163	72			
1125							1.65	1.61	3.83	0.08	0.00	1.82	1.83	3.36	0.04	0.01										
4-15-63					755	8.0	35	18	80	3.4	0	112	88	114	2.1	0.2	0.44	16	ABS=0.0	477	51	160	68			
1515							1.75	1.45	3.48	0.09	0.00	1.84	1.83	3.21	0.03	0.01										
4-29-63	235.9				763	8.0	35	19	84	3.0	0	116	92	116	3.4	0.2	0.52	15	ABS=0.03 Cu =0.00 Zn =0.01	448	52	164	69			
1835							1.75	1.53	3.65	0.08	0.00	1.90	1.92	3.27	0.05	0.01										

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

32505-D-8 6-61 200 SPO

ANALYSES OF SURFACE WATER

SOUTH BAY AQUEDUCT

Date and time sampled P.S.T.	Water Elevation (feet)	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N C ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by [i]
							equivalents per million																			
BETHANY FOREBAY AT SOUTH BAY PUMPING PLANT (STA. 207)																										
5-13-63 1300	233.53				787	7.9	38 / 1.90	18 / 1.46	82 / 3.57	3.0 / 0.08	0 / 0.00	120 / 1.97	90 / 1.87	119 / 3.36	0.2 / 0.00	0.3 / 0.02	0.49	14	ABS=0.01 Cu =0.00 Zn =0.00	400	51	168	70			
5-27-63 1230	237.95				593	8.0	27 / 1.35	14 / 1.17	64 / 2.78	2.5 / 0.06	0 / 0.00	96 / 1.57	68 / 1.42	87 / 2.45	0.4 / 0.01	0.2 / 0.01	0.39	15	ABS=0.01 Cu =0.00 Zn =0.00	340	52	126	47			
6-10-63 1300	237.5				314	7.4	17 / 0.85	6.9 / 0.57	30 / 1.30	1.6 / 0.04	0 / 0.00	58 / 0.95	29 / 0.60	42 / 1.18	0.2 / 0.00	0.1 / 0.00	0.19	15	ABS=0.01 Cu =0.00 Zn =0.00	157	47	71	23			
6-24-63 1105	238.12				280	7.7	15 / 0.75	6.9 / 0.57	25 / 1.09	1.8 / 0.05	0 / 0.00	57 / 0.93	25 / 0.52	37 / 1.04	0.6 / 0.01	0.1 / 0.00	0.17	13	ABS=0.00 Cu =0.00 Zn =0.00	156	44	66	19			
7-8-63 1050	237.3				307	7.4	18 / 0.90	7.3 / 0.60	26 / 1.13	1.8 / 0.05	0 / 0.00	63 / 1.03	27 / 0.56	41 / 1.16	0.6 / 0.01	0.2 / 0.01	0.14	14	ABS=0.00 Cu =0.00 Zn =0.00	170	42	75	23			
7-23-63	235.1				344	7.9	19 / 0.95	8.6 / 0.71	36 / 1.57	1.9 / 0.05	0 / 0.00	73 / 1.20	30 / 0.62	48 / 1.35	1.0 / 0.02	0.2 / 0.01	0.14	14	Cu =0.00 Zn =0.00	200	48	83	23			
8-5-63 1400	236.1				334	9.4	18 / 0.90	9.5 / 0.78	32 / 1.39	2.0 / 0.05	21 / 0.70	39 / 0.64	27 / 0.56	43 / 1.21	0.1 / 0.00	0.2 / 0.01	0.14	2.4	Cu =0.00 Zn =0.00	182	44	84	18			
8-19-63 1230	234.7				364	7.1	19 / 0.95	10 / 0.87	34 / 1.48	1.7 / 0.04	0 / 0.00	86 / 1.41	26 / 0.54	46 / 1.30	1.1 / 0.02	0.1 / 0.00	0.14	17	Cu =0.00 Zn =0.00	214	44	91	21			
9-3-63 1715	236.3				812	6.3	27 / 1.35	20 / 1.63	47 / 2.04	17 / 0.43	0 / 0.00	303 / 4.97	17 / 0.35	62 / 1.75	0.4 / 0.01	0.1 / 0.00	0.1	19	Cu =0.00 Zn =0.06	339	37	149	0			
9-30-63 1300	236.4				593	7.7	31 / 1.55	14 / 1.17	63 / 2.74	3.2 / 0.08	0 / 0.00	128 / 2.10	42 / 0.87	90 / 2.54	1.62 / 0.02	0.02 / 0.01	0.23	19	Cu =0.02	332	49	136	31			

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown.

e Derived from conductivity vs TDS curves

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h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

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32505-6-61 6-63 200 SPO

TABLE D-2

ANALYSES OF SURFACE WATER

SOUTH BAY AQUEDUCT

Date and time sampled PST	Water Elevation (feet)	Temp in °F	Specific Location of Collection	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: NC ppm	Turbidity in ppm	Coliform MPN/ml	Analyzed by f
LIVERMORE CANAL AT PATTERSON RESERVOIR (STA. 214)																									
10-9-62 0935	707.4		Reservoir	406	7.9	26 / 1.30	11 / 0.88	47 / 2.04	2.6 / 0.07	0 / 0.00	104 / 1.70	31 / 0.64	68 / 1.92	1.0 / 0.02	0.2 / 0.01	0.18	16		288	48	109	24			DWR
11-1-62 1637	708.3		Reservoir	523	8.2	27 / 1.35	13 / 1.07	57 / 2.48	2.7 / 0.07	0 / 0.00	111 / 1.82	38 / 0.79	80 / 2.26	0.5 / 0.01	0.2 / 0.01	0.23	14		308	50	121	30			
11-20-62 1059	706.95		Reservoir	567	8.0	26 / 1.30	15 / 1.26	64 / 2.78	2.9 / 0.07	0 / 0.00	112 / 1.84	—	91 / 2.57	—	—	0.27		Turb. = 2.0	346	51	128	36			
12-9-62 1800	703.4		Reservoir	642	8.2	33 / 1.65	14 / 1.17	73 / 3.18	3.2 / 0.08	0 / 0.00	122 / 2.00	48 / 1.00	101 / 2.85	0.9 / 0.01	0.2 / 0.01	0.27	17		387	52	141	41			
12-24-62 1520	707.9		Reservoir	690		34 / 1.70	15 / 1.24	78 / 3.39	3.4 / 0.09			56 / 1.16	114 / 3.21		0.2 / 0.01	0.30		Al=0.10 Pb=0.00 As=0.01 Mn=0.00 Cu=0.00 Zn=0.00 Se=0.001	409	53	147				
1-7-63 1330			Reservoir	674	8.8	34 / 1.70	16 / 1.28	77 / 3.35	3.4 / 0.09	9 / 0.30	107 / 1.75	56 / 1.16	114 / 3.21	0.9 / 0.01	0.2 / 0.01	0.27	16		423	52	149	47			
1-21-63 1420	702.7		Reservoir	744	9.0	38 / 1.90	15 / 1.22	85 / 3.70	3.7 / 0.09	8 / 0.27	114 / 1.87	61 / 1.27	123 / 3.47	0.2 / 0.00	0.2 / 0.01	0.30	16		438	54	156	49			
2-18-63 1525	693.85		Reservoir	688	8.2	29 / 1.45	17 / 1.43	86 / 3.74	3.6 / 0.09	0 / 0.00	113 / 1.85	58 / 1.21	120 / 3.38	1.7 / 0.03	0.3 / 0.02	0.29	16	ABS=0.00	407	56	144	51			
3-1-63 1610	692.1		Reservoir	709	8.2	32 / 1.60	16 / 1.30	83 / 3.61	3.5 / 0.09	0 / 0.00	123 / 2.02	59 / 1.23	121 / 3.41	0.3 / 0.00	0.1 / 0.00	0.28	17	ABS=0.0	337	55	145	44			
3-18-63 1630	689.0		Reservoir	709	8.4	32 / 1.60	17 / 1.40	77 / 3.35	3.5 / 0.09	3 / 0.10	116 / 1.90	60 / 1.25	117 / 3.30	1.3 / 0.02	0.1 / 0.00	0.32	18	ABS=0.0	358	52	150	50			
4-1-63 1245			Canal	716	7.9	34 / 1.70	17 / 1.42	83 / 3.61	3.0 / 0.08	0 / 0.00	112 / 1.84	82 / 1.71	109 / 3.07	1.1 / 0.02	0.2 / 0.01	0.39	15	ABS=0.0	442	53	156	64			
4-15-63 1620			Canal	708	8.5	32 / 1.60	16 / 1.34	82 / 3.57	3.2 / 0.08	6 / 0.20	94 / 1.54	83 / 1.73	104 / 2.93	0.4 / 0.01	0.1 / 0.01	0.34	8.8	ABS=0.0	429	54	147	60			
4-29-63 1545	705.4		Canal	772	7.9	39 / 1.95	17 / 1.41	85 / 3.70	3.7 / 0.09	0 / 0.00	126 / 2.06	90 / 1.87	117 / 3.30	0.6 / 0.01	0.2 / 0.01	0.52	18	ABS=0.02 Cu =0.00 Zn =0.02	458	52	168	65			

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

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ANALYSES OF SURFACE WATER

SOUTH BAY AQUEDUCT

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																		LIVERMORE CANAL AT PATTERSON RESERVOIR (STA. 214)							
5-13-63 1425	707.8		Canal	830	8.0	38 1.90	17 1.42	88 3.83	3.2 0.08	0 0.00	122 2.00	88 1.83	119 3.36	0.2 0.00	0.3 0.02	0.46	15	ABS=0.01 Cu =0.00 Zn =0.00	434	53	166	66			DWR
5-27-63 1350	707.7		Canal	795	7.8	36 1.80	19 1.54	93 4.04	3.2 0.08	0 0.00	120 1.97	90 1.87	122 3.44	2.6 0.03	0.2 0.01	0.54	18	ABS=0.02 Cu =0.00 Zn =0.00	469	54	167	69			
6-10-63 1400	707.4		Canal	359	7.4	22 1.10	7.8 0.64	34 1.48	1.8 0.05	0 0.00	72 1.18	34 0.71	48 1.35	0.9 0.01	0.1 0.00	0.22	15	Cu =0.00 Zn =0.00 ABS=0.00	193	45	87	28			
6-24-63 1240	708.6		Canal	310	7.5	18 0.90	7.3 0.60	27 1.17	1.8 0.05	0 0.00	64 1.05	28 0.58	40 1.13	0.5 0.01	0.2 0.01	0.17	13	ABS=0.00 Cu =0.00 Zn =0.00	173	43	75	23			
7-8-63 1250	708.1		Canal	318	7.9	19 0.95	7.2 0.59	26 1.13	1.8 0.05	0 0.00	65 1.06	26 0.54	41 1.16	0.4 0.01	0.2 0.01	0.19	13	ABS=0.01 Cu =0.00 Zn =0.00	175	42	77	24			
7-22-63 1400	702.5		Canal	350	8.3	20 1.00	8.5 0.70	36 1.57	1.9 0.05	0 0.00	77 1.26	30 0.62	48 1.35	0.5 0.01	0.1 0.00	0.13	14	Cu =0.00 Zn =0.00	201	47	85	22			
8-5-63 1530	709.1		Canal	337	8.4	19 0.95	8.9 0.73	31 1.35	2.0 0.05	0 0.00	80 1.31	27 0.56	43 1.21	0.1 0.00	0.1 0.00	0.15	9.0	Cu =0.00 Zn =0.00	188	44	84	18			
8-19-63 1345	709.2		Canal	368	7.7	21 1.05	9.8 0.81	35 1.52	1.8 0.05	0 0.00	88 1.44	27 0.56	50 1.41	0.7 0.01	0.2 0.01	0.18	15	Cu =0.01 Zn =0.00	212	44	93	21			
9-3-63 1750			Canal	389			2.00[g]					28 0.58	53 1.49						220		100				
9-30-63 1400	706.0		Canal	590			2.76[g]					47 0.98	94 2.65						348		138				

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{+6}), reported here as $\frac{0.0}{0.00}$ except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated

TABLE D-3

SUMMARY OF COLIFORM ANALYSES

Station	Station Number	Coliform MPN/ml		
		Maximum	Median	Minimum
North Coastal Region (No. 1)				
Gualala River, South Fork, near Annapolis	9a	620	18.5	0.62
Navarro River near Navarro	8b	230	4.3	0.23
Noyo River near Fort Bragg	10c	230	13	0.23
Russian River, East Fork, at Potter Valley Powerhouse	10a	620	6.2	0.23
Russian River at Guerneville	10	7,000+	10.6	2.1
Russian River near Healdsburg	9	7,000+	14.6	0.23
Russian River near Hopland	8a	2,400	57.5	2.3
San Francisco Bay Region (No. 2)				
Alameda Creek near Niles	73	2,400	62	1.3
Coyote Creek near Madrone	82	620	6.2	0.045
Los Gatos Creek near Los Gatos	74	620	6.2	0.21
Napa River near St. Helena	72	7,000+	230	6.2
Central Coastal Region (No. 3)				
Carmel River at Robles del Rio	83	62	12.1	0.62
Nacimiento River near San Miguel	43b	230	23	0.21
Pajaro River near Chittenden	77	7,000+	62	2.3
Salinas River near Bradley	43c	2,400	6.2	0.23
Salinas River at Paso Robles	43a	2,400	126	5
Salinas River near Spreckels	43	7,000+	230	2.3
San Antonio River near Pleyto	43d	62	6.2	0.62
San Benito River near Bear Valley Fire Station	77a	620	13.8	0.23
San Lorenzo River at Big Trees near Felton	75	2,400	23	2.3
Soquel Creek at Soquel	76	2,400	39	0.62
Uvas Creek near Morgan Hill	96	620	6.2	0.62

TABLE D-4

SPECTROGRAPHIC ANALYSES OF SURFACE WATER

Station	Sta No	Date	Constituents in parts per billion															
			Aluminum (Al)	Beryllium (Be)	Bismuth (Bi)	Cadmium (Cd)	Cobalt (Co)	Chromium (Cr)	Copper (Cu)	Iron (Fe)	Gallium (Ga)	Germanium (Ge)	Manganese (Mn)	Molybdenum (Mo)	Nickel (Ni)	Lead (Pb)	Titanium (Ti)	Vanadium (V)	Zinc (Zn)
NORTH COASTAL REGION (NO. 1)																		
RUSSIAN RIVER, EAST PORK AT POTTER VALLEY POWERHOUSE	10a	5-7-63	247	< 1.3	< 1.3	< 3.3	< 1.3	< 1.3	< 3.3	23	< 6.7	< 1.3	≤ 3.3	< 1.3	2.6	< 3.3	< 1.3	< 1.3	< 6.7
RUSSIAN RIVER, EAST FORK AT POTTER VALLEY POWERHOUSE	10a	9-11-63	6.3	< 1.3	< 0.67	< 3.3	< 3.3	< 3.3	< 3.3	4.9	< 13	< 0.67	< 3.3	≤ 0.67	≤ 0.67	< 3.3	< 1.3	< 0.67	< 13
RUSSIAN RIVER AT GUERNEVILLE	10	5-6-63	73	< 1.3	< 1.3	< 3.3	< 1.3	< 1.3	< 3.3	10	< 6.7	< 1.3	≤ 3.3	< 1.3	3.0	< 3.3	< 1.3	< 1.3	< 6.7
RUSSIAN RIVER AT GUERNEVILLE	10	9-13-63	8.0	< 1.3	< 0.67	< 3.3	< 3.3	< 3.3	< 3.3	4.1	< 13	< 0.67		≤ 0.67	≤ 0.67	< 3.3	< 1.3	5.3	< 13
SAN FRANCISCO BAY REGION (NO. 2)																			
ALAMEDA CREEK NEAR NILES	73	5-14-63	41	< 1.3	< 1.3	< 3.3	< 1.3	< 1.3	< 3.3	5.2	< 6.7	< 1.3	< 3.3	≤ 1.3	3.5	< 3.3	< 1.3	8.7	< 6.7
ALAMEDA CREEK NEAR NILES	73	9-4-63	26	< 1.3	< 0.67	< 3.3	< 3.3	< 3.3	< 3.3	26	< 13	< 0.67	< 3.3	≤ 0.67	≤ 0.67	< 3.3	< 1.3	21	< 13
ARROYO DEL VALLE NEAR LIVERMORE	71	5-14-63	23	< 1.3	< 1.3	< 3.3	< 1.3	< 1.3	< 3.3	4.3	< 6.7	< 1.3	< 3.3	≤ 1.3	< 1.3	< 3.3	< 1.3	< 1.3	< 6.7
ARROYO DEL VALLE NEAR LIVERMORE	71	9-3-63	9.3	< 1.3	< 0.67	< 3.3	< 3.3	< 3.3	< 3.3	9.3	< 13	< 0.67	< 3.3	< 0.67	≤ 0.67	< 3.3	< 1.3	< 0.67	< 13
COYOTE CREEK NEAR MADRONE	82	5-14-63	193	< 1.3	< 1.3	< 3.3	< 1.3	< 1.3	< 3.3	31	< 6.7	< 1.3	< 3.3	< 1.3	4.1	< 3.3	< 8.0	< 1.3	< 6.7
COYOTE CREEK NEAR MADRONE	82	9-5-63	7.3	< 1.3	< 0.67	< 3.3	< 3.3	< 3.3	< 3.3	17	< 13	< 0.67	< 3.3	≤ 0.67	2.9	< 3.3	6.0	< 0.67	< 13
NAPA RIVER NEAR ST. HELENA	72	5-8-63	80	< 1.3	< 1.3	< 3.3	< 1.3	< 1.3	< 3.3	17	< 6.7	< 1.3	17	< 1.3	3.3	< 3.3	< 1.3	5.9	< 6.7
CENTRAL COASTAL REGION (NO. 3)																			
PAJARO RIVER AT CHITTENDEN	77	5-15-63	25	< 1.3	< 1.3	< 3.3	< 1.3	< 1.3	< 3.3	< 3.3	< 6.7	< 1.3	< 3.3	< 1.3	6.4	< 3.3	< 1.3	6.7	< 6.7
PAJARO RIVER AT CHITTENDEN	77	9-5-63	8.0	< 1.3	< 0.67	< 3.3	< 3.3	< 3.3	< 3.3	9.3	< 13	< 0.67	< 3.3	≤ 0.67	4.5	< 3.3	< 1 3	11	< 13
SALINAS RIVER NEAR SPRECKELS	43	5-16-63	45	< 1.3	< 1.3	< 3.3	< 1.3	< 1.3	< 3.3	5.7	< 6.7	< 1.3	< 3.3	≤ 1.3	< 1.3	< 1.3	< 1.3	11	< 6.7
SALINAS RIVER NEAR BRADLEY	43c	9-4-63	8.0	< 1.3	< 0.67	< 3.3	< 3.3	< 3.3	< 3.3	11	< 13	< 0.67	8.0	19	7.3	< 3.3	< 1.3	6.3	< 13

TABLE D-5

RADIOASSAYS OF SURFACE WATER

			Pico curies per liter			
REGION (NO. 1)						
BIG RIVER NEAR MOUTH	8c	5/7/63	0 ± 0.2	0 ± 0.2	4.2 ± 4.7	0.8 ± 4.7
BIG RIVER NEAR MOUTH	8c	9/13/63	0.1 ± 0.4	0 ± 0.3	2.2 ± 6.2	0 ± 6.1
GUALALA RIVER, SOUTH FORK NEAR ANNAPOLIS	9a	5/6/63	0 ± 0.2	0 ± 0.2	2.2 ± 4.2	0 ± 4.2
GUALALA RIVER, SOUTH FORK NEAR ANNAPOLIS	9a	9/13/63	0.4 ± 0.4	0 ± 0.3	0 ± 6.1	0 ± 6.1
NAVARRO RIVER NEAR NAVARRO	8b	5/7/63	0 ± 0.2	0 ± 0.2	7.9 ± 4.4	2.2 ± 4.3
NAVARRO RIVER NEAR NAVARRO	8b	9/13/63	0.3 ± 0.4	0.5 ± 0.4	4.0 ± 6.2	5.0 ± 6.2
NOYO RIVER NEAR FORT BRAGG	10c	5/7/63	0 ± 0.1	0 ± 0.1	6.4 ± 4.3	2.6 ± 4.3
NOYO RIVER NEAR FORT BRAGG	10c	9/13/63	0.2 ± 0.3	0.1 ± 0.2	2.9 ± 6.2	0.4 ± 6.1
RUSSIAN RIVER, EAST FORK AT POTTER VALLEY POWERHOUSE	10a	5/7/63	0.2 ± 0.2	0.3 ± 0.2	10.4 ± 4.4	19.8 ± 4.6
RUSSIAN RIVER, EAST FORK AT POTTER VALLEY POWERHOUSE	10a	9/11/63	0 ± 0.4	0 ± 0.4	5.1 ± 6.2	5.1 ± 6.2
RUSSIAN RIVER AT GUERNEVILLE	10	5/6/63	0.1 ± 0.2	0.1 ± 0.2	1.1 ± 4.3	6.4 ± 4.4
RUSSIAN RIVER AT GUERNEVILLE	10	9/13/63	0.1 ± 0.3	0.3 ± 0.4	0.8 ± 6.2	0 ± 6.1
RUSSIAN RIVER NEAR HEALDSBURG	9	5/6/63	0 ± 0.2	0 ± 0.2	6.6 ± 4.2	7.8 ± 4.3
RUSSIAN RIVER NEAR HEALDSBURG	9	9/11/63	0.1 ± 0.3	0 ± 0.3	4.1 ± 6.2	0 ± 6.1
RUSSIAN RIVER NEAR HOPLAND	8a	5/8/63	0.1 ± 0.2	0 ± 0.2	8.4 ± 4.8	5.8 ± 4.8

TABLE D-5

RADIOASSAYS OF SURFACE WATER

Location	No.	Date	Picocuries per liter			
			Suspended Alpha	Dissolved Alpha	Dissolved Beta	Solids Beta
REGION (NO. 1)						
RUSSIAN RIVER NEAR HOPLAND	8a	9/11/63	0 ± 0.3	0.3 ± 0.4	0 ± 6.2	3.3 ± 6.2
REGION (NO. 2)						
ALAMEDA CREEK NEAR NILES	73	5/14/63	0 ± 0.3	0 ± 0.3	6.4 ± 6.2	4.3 ± 6.2
ALAMEDA CREEK NEAR NILES	73	9/4/63	0.1 ± 0.4	0.5 ± 0.5	7.0 ± 6.1	8.0 ± 6.1
ARROYO DEL VALLE NEAR LIVERMORE	71	5/14/63	0.2 ± 0.2	0.5 ± 0.3	1.0 ± 6.2	13.4 ± 6.4
ARROYO DEL VALLE NEAR LIVERMORE	71	9/3/63	0 ± 0.3	0 ± 0.3	11.2 ± 6.2	4.7 ± 6.1
COYOTE CREEK NEAR MADRONE	82	5/14/63	0.2 ± 0.3	0.4 ± 0.3	4.7 ± 6.4	8.8 ± 6.5
COYOTE CREEK NEAR MADRONE	82	9/5/63	0.1 ± 0.4	0 ± 0.4	0 ± 6.3	0 ± 6.2
LOS GATOS CREEK NEAR LOS GATOS	74	5/16/63	0 ± 0.4	0 ± 0.4	0.9 ± 6.4	0 ± 6.4
LOS GATOS CREEK NEAR LOS GATOS	74	9/5/63	0.1 ± 0.4	0 ± 0.3	0 ± 6.3	0 ± 6.2
NAPA RIVER NEAR ST. HELENA	72	5/8/63	0 ± 0.1	0 ± 0.1	7.3 ± 4.5	4.8 ± 4.2
REGION (NO. 3)						
CARMEL RIVER AT ROBLES DEL RIO	83	5/16/63	0.3 ± 0.4	0 ± 0.3	6.9 ± 6.3	1.9 ± 6.2
NACIMIENTO RIVER NEAR SAN MIGUEL	43b	9/4/63	0.4 ± 0.4	0.1 ± 0.4	0 ± 6.1	0 ± 6.1
PAJARO RIVER NEAR CHITTENDEN	77	5/15/63	0.3 ± 0.2	0.1 ± 0.2	4.0 ± 6.3	0.4 ± 6.2
PAJARO RIVER NEAR CHITTENDEN	77	9/5/63	0 ± 0.4	0 ± 0.3	8.4 ± 6.2	0.6 ± 6.5

TABLE D-5

RADIOASSAYS OF SURFACE WATER

Station	Sta No	Date	Pico curies per liter			
			Dissolved Alpha	Solid Alpha	Dissolved Beta	Solid Beta
REGION (NO. 3)						
SALINAS RIVER NEAR BRADLEY	43c	5/15/63	0 ± 0.2	0.7 ± 0.4	6.8 ± 6.2	16.3 ± 6.3
SALINAS RIVER NEAR BRADLEY	43c	9/4/63	0 ± 0.6	0 ± 0.5	0 ± 6.2	1.9 ± 6.2
SALINAS RIVER AT PASO ROBLES	43a	5/15/63	0.3 ± 0.5	0 ± 0.3	1.5 ± 6.3	0 ± 6.3
SALINAS RIVER NEAR SPRECKELS	43	5/16/63	0.6 ± 0.4	0.2 ± 0.3	13.1 ± 6.3	7.8 ± 6.2
SALINAS RIVER NEAR SPRECKELS	43	9/5/63	0 ± 0.4	0 ± 0.4	29.7 ± 6.5	0.5 ± 6.0
SAN ANTONIO RIVER NEAR PLEYTO	43d	5/15/63	0.5 ± 0.5	0 ± 0.4	0 ± 6.1	0.1 ± 6.1
SAN BENITO RIVER NEAR BEAR VALLEY FIRE STATION	77a	5/15/63	0.1 ± 0.3	0.1 ± 0.3	4.8 ± 6.2	3.6 ± 6.2
SAN BENITO RIVER NEAR BEAR VALLEY FIRE STATION	77a	9/4/63	0.5 ± 0.6	0 ± 0.4	4.8 ± 6.2	0 ± 6.1
SAN LORENZO RIVER AT BIG TREES NEAR FELTON	75	5/16/63	0 ± 0.4	0 ± 0.4	0 ± 6.3	0 ± 6.3
SAN LORENZO RIVER AT BIG TREES NEAR FELTON	75	9/5/63	0.3 ± 0.4	0 ± 0.4	5.8 ± 6.2	2.4 ± 6.1
SOQUEL CREEK AT SOQUEL	76	5/16/63	0.1 ± 0.3	0 ± 0.3	0 ± 6.2	0 ± 6.1
SOQUEL CREEK AT SOQUEL	76	9/5/63	0 ± 0.4	0 ± 0.4	5.9 ± 6.2	6.9 ± 6.2
UVAS CREEK NEAR MORGAN HILL	96	5/14/63	0 ± 0.4	0 ± 0.4	8.5 ± 6.2	0.2 ± 6.1
UVAS CREEK NEAR MORGAN HILL	96	9/5/63	0 ± 0.3	0 ± 0.3	0 ± 6.1	0 ± 6.0

TABLE D-6

DESCRIPTION OF SALINITY OBSERVATION STATIONS

1963

STATION	Miles from Golden Gate (a)	Time Interval (b) Hours	Time Interval (b) Min	LOCATION
Sobrante Beach - San Pablo Bay	20.5	2	50	South shore of San Pablo Bay from wharf approximately 1.5 miles upstream from Point Pinole.
Crockett - San Pablo Bay	27.7	3	30	West end of Carquinez Strait, south shore, 0.2 mile east of Carquinez Bridge on wharf of C and H Sugar Refinery Corporation.
Benicia - Carquinez Strait	32.5	3	50	East end of Carquinez Strait, north shore, 1.1 miles west of Southern Pacific Company railroad bridge at Benicia Arsenal.
Martinez - Carquinez Strait	33.1	3	50	Sampled from Shell Oil Company dock, about 0.6 mile downstream from Southern Pacific Company railroad bridge.
West Suisun - Suisun Bay	37.0	4	10	West end of Suisun Bay, north shore, 2.5 miles northeast of Southern Pacific railroad bridge at service pier of U. S. Maritime Commission, Reserve Fleet mooring area.
Innisfail Ferry - Suisun Bay	47.3	4	50	Montezuma Slough, about one mile east of junction with Cutoff Slough near north end of Grizzly Island.
Port Chicago - Suisun Bay	41.0	4	20	South Shore of Suisun Bay at U. S. Naval ammunition loading wharf below Port Chicago.
Spoonbill Creek - Suisun Bay	48.9	5	05	At Sacramento Northern Railroad crossing.
Pittsburg - Suisun Bay	48.0	5	00	East end of Suisun Bay, south shore, at Pittsburg Yacht Harbor.
Collinsville - Sacramento River	50.8	5	25	Sacramento River, north bank at junction with San Joaquin River.

MAXIMUM OBSERVED SALINITY AT BAY AND DELTA STATIONS

In parts of chloride per million parts of water*

STATION	WATER YEAR 1931	1938	1939	1944 c	1952	1955	1956 d	1958	1959	1961	1962	1963
Sacramento — San Joaquin System Unimpaired Runoff in Percent of Average (e)	34	188	49	62	168	63	175	166	66	61		
Sobrante Beach**					14200	19000	16200	13800	17200	15000	15600	13300
Crockett					13200	16600	15300	11900	15000	19900	13900	13100
Benicia**				13900	10400	15100	12300	12100	19200	14000	12300	9780
Martinez	16900	11600	16400		8900	11900	11900	7150	10200	11600	12700	11500
West Suisun**					7900	12600	11200	7520	13200	13200	11100	8280
Innisfail Ferry**	14000	3300	13600	7900	4200	5780	5200	3040	9640	13900	5690	2890
Port Chicago					6900	12500	9750	5830	15640	11900	9370	9200
Spoonbill Creek	13900	2560	11800	7300	2800	6400	4040	930	6270	5900	3540	2940
Pittsburg					1200	7800	3440	1200	5110	3920	3980	1350
Collinsville	12600	860	10400	4700	783	3880	2280	550	5430	4300	2430	1980

* Ocean water contains approximately 18,200 parts per million.
** Station discontinued July 1963.

a Mileage measured to station along main channel. For stations off the main channel, the mileage shown is the same distance along the main channel to a point whereon the time of the occurrence of the tidal phase is the same as that of the observation station.
b Time interval between high tide at Golden Gate and time for taking samples at station.
c Releases of stored water from Shasta Lake commenced in 1944.
d Releases of stored water from Folsom Reservoir commenced in 1956.
e Average taken as mean annual unimpaired flow at foothill stations of major tributaries for 50-year period October 1907 through September 1957.

TABLE D-7

SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS*

In parts of chloride per million parts of water

STATION	DATE							
	10-2-62	10-6-62	10-10-62	10-14-62	10-18-62	10-22-62	10-26-62	10-30-62
Sobrante Beach	13300	a12700	a14200	11900	a4530	4490	7520	8680
Crockett	11400	10700	e11500	9910	2640		4760	6230
Benicia	7820	9180	e9780	7920	944	4530	3970	5190
Martinez	a9000	a8470	e9070	a8870	1320	3580	2910	a3970
West Suisun	7820	bd8280	7080		755	ae944		2470
Innisfail Ferry	2740	a2890			a1510		781	
Port Chicago	6460	6130	d7830	2080	566	755	969	
Spoonbill Creek	1010	a1490	a1250	1560	a212	85	71	55
Pittsburg	492		a642		a142	61	19	29
Collinsville	a426	ad447	a382	247	a68		40	31

STATION	DATE							
	11-2-62	11-6-62	11-10-62	11-14-62	11-18-62	11-22-62	11-26-62	11-30-62
Sobrante Beach	8600	9020	11000	10400	a9500	13000	11700	10200
Crockett		a7190	9770	8540	7130	9220	10000	7670
Benicia	4200	4630	5960	7340	4050	8100	4920	5200
Martinez	7500	5820	a6980	7900	5710	8960	9250	8290
West Suisun	1730	2120		4400	1390	5180		4000
Innisfail Ferry	843	935			1080	1040		1240
Port Chicago	1470			d3170		4360	6090	2640
Spoonbill Creek	a56	65	135	260	138	145	357	280
Pittsburg		27	bd61	136	53	de63	314	81
Collinsville	23	21	27	a26	26	25	48	a41

STATION	DATE							
	12-2-62	12-6-62	12-10-62	12-14-62	12-18-62	12-22-62	12-26-62	12-30-62
Sobrante Beach	9440	9890	10200	10200	8140	8790	7360	8350
Crockett	7330	7040	8580	7000	7130	5900	5670	5590
Benicia	4510	5070	5130	5460	4740		3280	3080
Martinez	6860	7830	7710	5980	5070	6520	6360	
West Suisun	2320		d2630	d3080	2410	1130	1390	810
Innisfail Ferry				728	1010			713
Port Chicago			2580		1450	2760		
Spoonbill Creek	171	71	38	72	46	23	30	
Pittsburg		34		29	d27		24	
Collinsville	37	20	15	a10	12	15	11	12

STATION	DATE							
	1-2-63	1-6-63	1-10-63	1-14-63	1-18-63	1-22-63	1-26-63	1-30-63
Sobrante Beach	8230	9060	9120	8680	8250	10600	11000	11100
Crockett	5780	d7480	7340	5340	7290			9250
Benicia	2810	5400	4470	2540	6070	7580	6380	bd6090
Martinez	5130	4470	7110	a5670	7360	9180	8020	a8310
West Suisun	1160	2530		2140	ae1840		4030	3790
Innisfail Ferry		492		641		856		1200
Port Chicago		2330	2060	443	4340	4240	4070	4070
Spoonbill Creek	30	32	62	42	57	376	431	444
Pittsburg	27	bd27		d34	47	d96		146
Collinsville	12	22	14	24	20	142	52	106

* Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.
b Taken on following day.
c Taken two days later.
d Taken over one hour off scheduled time.
e Taken on preceding day.
f Taken two days earlier.
g Station located above tidal action.

TABLE D-7

SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS*

In parts of chloride per million parts of water

STATION	DATE							
	2-2-63	2-6-63	2-10-63	2-14-63	2-18-63	2-22-63	2-26-63	
Sobrante Beach	4700	1440	4690	2200	3470	4490	a6170	
Crockett	3550	763	2400	1670	1970	3970	3370	
Benicia	1910	54	514	1060	250	2800	810	
Martinez	2850	38	935		386		a1870	
West Suisun	496		76	59		492	178	
Innisfail Ferry	1050	142	226		255	337	a450	
Port Chicago	bd37		35	19		e371	33	
Spoonbill Creek	173	8	14	19	20	31	a29	
Pittsburg		14			bd25	32	ab32	
Collinsville	d16	9		22	14	18	a48	

STATION	DATE							
	3-2-63	3-6-63	3-10-63	3-14-63	3-18-63	3-22-63	3-26-63	3-30-63
Sobrante Beach	6360	8060	9090	a11200	7860	12300	ad11400	5340
Crockett	d3860	6700		7280	5730	11200	10100	5920
Benicia			5420	3750	3650	6700	7090	3400
Martinez	3030	6890		5630	6540	9610	a5730	3980
West Suisun	1530			2800	ae1070	510	2600	849
Innisfail Ferry	479			a476	524	529	a752	a752
Port Chicago	466	1616	1690	2620	ae1140		2820	680
Spoonbill Creek	29	31	32	a34	46	284	a246	49
Pittsburg		24	30	abd32	40		a95	73
Collinsville		17	27	25	23	30	a30	23

STATION	DATE							
	4-2-63	4-6-63	4-10-63	4-14-63	4-18-63	4-22-63	4-26-63	4-30-63
Sobrante Beach	5150	adf8450	a3790	a2010	a2670	a2960	a2770	3610
Crockett	1460	4180	2230	874	1070	1140	1260	807
Benicia	291	2620	158	85	b655	316		277
Martinez	583	2720	a3570	801	a22		de866	221
West Suisun	78	121	46	48	de29	36	30	ae70
Innisfail Ferry	607		a170	ad121		a86	a109	
Port Chicago	24	de368	d20		b17		d56	ae61
Spoonbill Creek		a19	a12	10	a7	a12	a10	8
Pittsburg	bd21				a7	abd23	a21	16
Collinsville	10	a12	a16	4	ab		7	10

STATION	DATE							
	5-2-63	5-6-63	5-10-63	5-14-63	5-18-63	5-22-63	5-26-63	5-30-63
Sobrante Beach	3270	a6040	a7330	a5150	a8910	a7920	a7520	a8510
Crockett	2670		3790	2380	5540	5150	3860	e3960
Benicia	1090	2820	2180	792	3910	4060	2570	e2670
Martinez	1460	a1390	a2030	1140	5150		3960	e2970
West Suisun	129	317	163	287	2250	4460	198	e366
Innisfail Ferry		a134		148	a121			
Port Chicago	bd33	d24	40	16	bd1110	624	44	
Spoonbill Creek	a15	a12	a14	15	a14	a12	12	a12
Pittsburg	a18		a15	13	a13	a13	a15	
Collinsville	a8	a8	a11	10	a17	a16	12	a8

* Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.
b Taken on following day.
c Taken two days later.
d Taken over one hour scheduled time.
e Taken on preceding day.
f Taken two days earlier.
g Station located above tidal action.

TABLE D-7

SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS*

In parts of chloride per million parts of water

STATION	DATE							
	6-2-63	6-6-63	6-10-63	6-14-63	6-18-63	6-22-63	6-26-63	6-30-63
Sobrante Beach	a5440	a9110	a10500	a12100	a11500	a10300	9920	e11700
Crockett	4750	5640	6730	e6830	9600	8510	7720	
Benicia	3370	4750	5540	e4750	7330	6930	3370	e5540
Martinez	1980	5350	5940	e4950	6140	6530	6930	e7030
West Suisun	1240	2480	4010	e2970		5440	3860	e3860
Inniafail Ferry					abd109			
Port Chicago	bd495	1810	2600	e990	3910			
Spoonbill Creek	a13			a30	ad109	a188	96	a166
Pittsburg			d19	a22	a58	a64	abd62	
Collinsville	a10		13	a15	a41	a14	a25	

STATION	DATE							
	7-2-63	7-6-63	7-10-63	7-14-63	7-18-63	7-22-63	7-26-63	7-30-63
Crockett	9180	8920	8820	e10400	11700	12200	10300	e11300
Martinez	8700	ad6450	a8370	aed6250	9510	9530	a8750	e9780
Port Chicago		5900	4470	aed4490	7330	7720		a4850
Spoonbill Creek		a409	a586	e1100	d882	abd1720	1270	a1920
Pittsburg	a84	cd426		abd353		d817		aed1170
Collinsville	a56	a40	368	a311	a445	1090	a728	e794

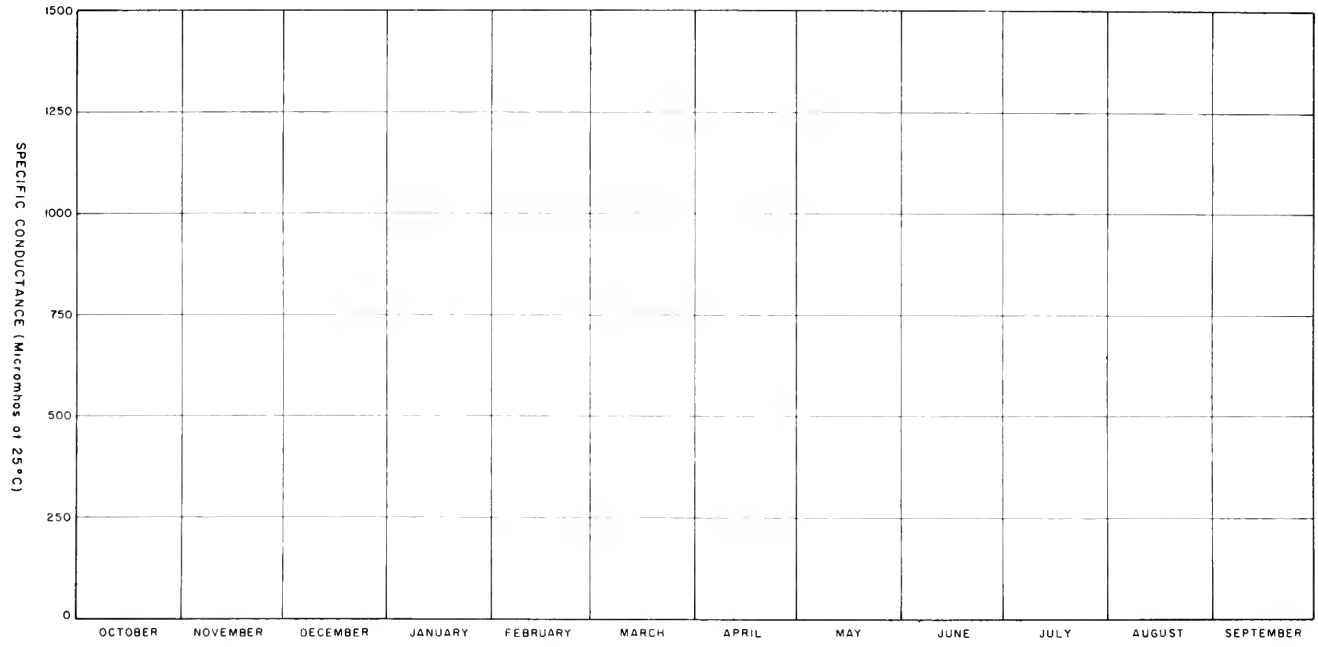
STATION	DATE							
	8-2-63	8-6-63	8-10-63	8-14-63	8-18-63	8-22-63	8-26-63	8-30-63
Crockett	12900	13100	12600	e12400	13200	12400	10900	e12100
Martinez	10600	a8000	11500	a8180	11400	9880	9710	e11400
Port Chicago	a5640	7830	6670	e8120	8780	8530	7190	9200
Spoonbill Creek	a2450	a2640	a2350	a2500		2520	2250	a2940
Pittsburg				ad906	abd1130		a1350	
Collinsville	a1260				a1720	1980	a1030	a1370

STATION	DATE							
	9-2-63	9-6-63	9-10-63	9-14-63	9-18-63	9-22-63	9-26-63	9-30-63
Crockett	12600	12400	11800	11000	10800	9800	10700	d9900
Martinez		10900	a8240	10800	9310	a8820		
Port Chicago		5490	6860	6280	5290	3330	3820	5490
Spoonbill Creek	a2350	2300	1690		882	417	a368	a735
Pittsburg					a333		a137	abd167
Collinsville	a1030	a1400	a515	a578	a98	172	a44	e220

* Samples taken at four-day intervals approximately one and one-half hours after high high tide.

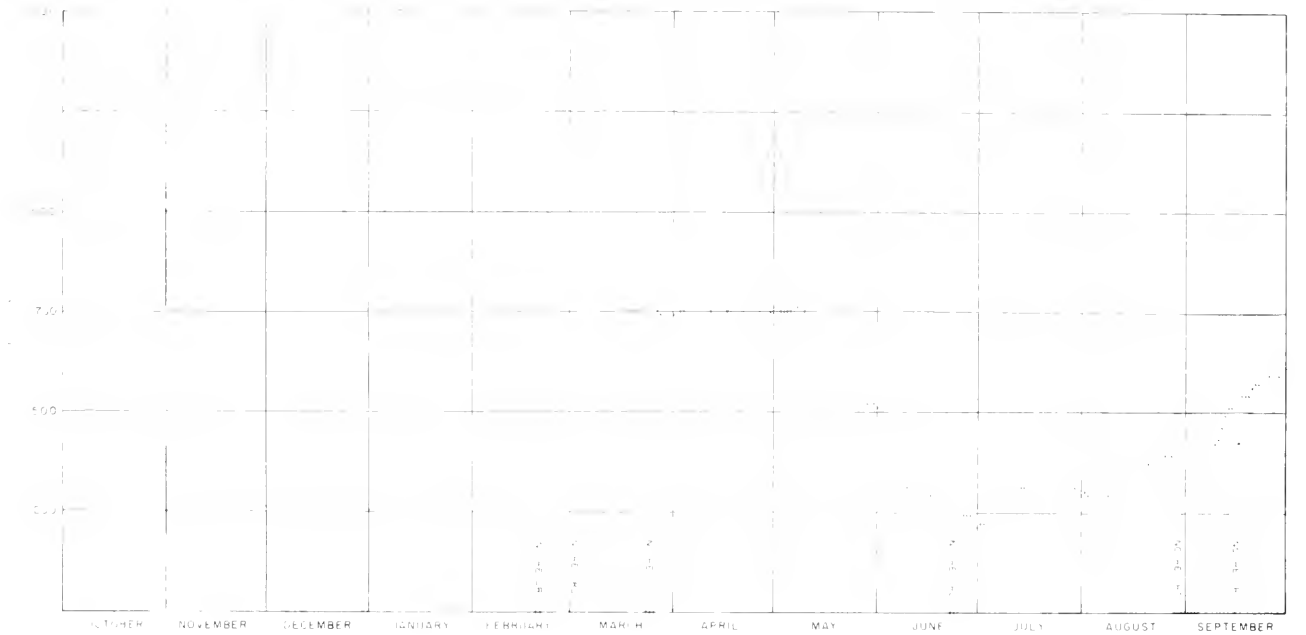
a Taken after low high tide.
b Taken on following day.
c Taken two days later.
d Taken over one hour off scheduled time.
e Taken on preceding day.
f Taken two days earlier.

FIGURE D-1



ELECTRICAL CONDUCTANCE
DAILY MEAN
ALAMEDA CREEK NEAR NILES (STA 73)
1963

FIGURE D-2



ELECTRICAL CONDUCTANCE
DAILY READINGS AT 1300 HOURS
BETHANY FOREBAY AT
SOUTH BAY PUMPING PLANT (STA 207)
1963

APPENDIX E

GROUND WATER QUALITY

GROUND WATER QUALITY

Data presented in this appendix are measured values of selected quality characteristics of ground water samples collected in the Central Coastal Area during the period from July 1, 1962 through June 30, 1963. This appendix consists of a table showing results of analyses of ground water and a table showing results of radioassay of ground water. Wells and ground water basins are numbered in accordance with the system described in Appendix C. The data are presented in water pollution control board region, ground water basin, and well number order.

Analyses of Ground Water

Tabulated values for dissolved minerals are the analytical quantity reported in parts per million (ppm) and a computed value for equivalents per million (epm). Electrical conductivity is reported as micromhos at 25°C and water temperature is reported in degrees Fahrenheit. Values for temperature are those measured in the field at the time of sampling. Laboratory analyses of ground water were performed by the Department of Water Resources, the United States Geological Survey, and Lein Laboratory, all in accordance with "Standard Methods for the Examination of Water and Waste Water", 11th Edition, or in accordance with U. S. Geological Survey Water Supply Paper 1454, "Methods for Collection and Analyses of Water Samples". The methods yield comparable results. Heavy metal concentrations were determined by "wet" analyses.

Table E-1 presents analyses of ground water. Definitions of abbreviations used in this table are as follows:

1. TDS---Total dissolved solids by gravimetric determination at 180°. The superscript "a" indicates a value determined by

summation of constituents.

2. T.O.--Odor.

3. ABS---Alkyl benzene sulfonate.

4. DWR---Department of Water Resources.

5. USGS--United States Geological Survey.

6. LL----Lein Laboratories.

Radioassay of Ground Water

Radioassay of ground water is presented in Table E-2. Determinations were made by the California Disaster Office of suspended and dissolved alpha and beta activities in some samples and for gross activity in other samples. The term pico curie used in this report is also written micro-micro curies and is further defined as 10^{-12} curies. The most probable error is reported along with the measured value. Results should be considered qualitative and undue emphasis should not be given to quantitative values.

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MDB&M									UKIAH VALLEY (1-15)													
G. C. Gillies domestic	14N/12W-9K1	9-29-62		620	8.0	67 / 3.34	22 / 1.84	37 / 1.61	1.7 / 0.04	0 / 0.00	356 / 5.83	50 / 1.04	1.2 / 0.03	0.4 / 0.01	1.0 / 0.02	0.9	25		376	24	259	6	USGS
J. Johnson domestic	14N/12W-11K1	10-62		294	7.6	18 / 0.90	20 / 1.65	8.9 / 0.39	0.7 / 0.02	0 / 0.00	113 / 1.85	17 / 0.35	7.8 / 0.22	36 / 0.58	0.7 / 0.04	0.3	18		184	13	127	34	USGS
W. Schmuck domestic	14N/12W-26P1	10-2-62	65	348	8.4	23 / 1.15	24 / 2.00	14 / 0.61	0.2 / 0.01	6 / 0.20	181 / 2.97	14 / 0.29	14 / 0.39	4.1 / 0.07	0.4 / 0.02	1.0	28		199	16	157	0	USGS
Ukiah Realty Co. irrigation	15N/12W-1Q1	10-2-62	66	287	7.9	28 / 1.40	13 / 1.10	12 / 0.52	1.8 / 0.05	0 / 0.00	158 / 2.59	14 / 0.29	7.8 / 0.22	1.3 / 0.02	0.6 / 0.03	0.2	16		170	17	125	0	USGS
Ukiah Water Co. municipal	15N/12W-21H1	10-2-62		257	8.4	25 / 1.25	12 / 0.99	9.8 / 0.43	1.0 / 0.03	3 / 0.10	147 / 2.41	8.0 / 0.17	4.0 / 0.11	1.0 / 0.02	0.2 / 0.01	0.5	16		141	16	112	0	USGS
J. Brooks Ranch domestic and irrigation	16N/12W-3J1	10-62		386	8.3	34 / 1.70	12 / 1.02	30 / 1.30	1.0 / 0.02	0 / 0.00	199 / 3.26	6.4 / 0.13	20 / 0.56	0.5 / 0.01	0.2 / 0.01	0.3	35		240	32	136	0	DWR
Frank Brown domestic	16N/12W-5D1	10-62	63	353	8.1	23 / 1.15	19 / 1.53	24 / 1.04	0.6 / 0.02	0 / 0.00	185 / 3.03	0.0 / 0.00	24 / 0.68	1.4 / 0.02	0.9 / 0.05	0.1	28		202	28	134	0	USGS
Frank Brown irrigation	16N/12W-5D2	10-62	62	348	7.2	18 / 0.90	18 / 1.44	30 / 1.30	0.3 / 0.01	0 / 0.00	200 / 3.28	0.0 / 0.00	16 / 0.45	0.9 / 0.01	1.0 / 0.05	0.1	26		200	36	117	0	USGS
P. G. & E. industrial and domestic	16N/12W-9Q1	10-2-62	61	408	8.3	28 / 1.40	17 / 1.38	42 / 1.83	0.9 / 0.02	7 / 0.23	246 / 4.03	6.0 / 0.12	7.2 / 0.20	1.0 / 0.02	1.0 / 0.05	0.2	29		250	40	139	0	USGS
J. I. Nelson domestic	17N/12W-18A1	10-62	63	1930	7.7	38 / 1.90	5.1 / 0.42	338 / 14.70	0.7 / 0.02	0 / 0.00	233 / 3.82	1.0 / 0.02	505 / 14.25	2.1 / 0.03	1.2 / 0.06	81	21		1270	86	116	0	USGS
Hotel Vichy domestic	17N/12W-28B1	10-2-62	62	212	7.2	17 / 0.85	9.4 / 0.77	11 / 0.48	0.3 / 0.01	0 / 0.00	84 / 1.38	15 / 0.31	6.8 / 0.19	17 / 0.27	0.7 / 0.04	0.3	31		149	23	81	12	USGS
										SANEL VALLEY (1-16)													
C. Bellarcantonino domestic	12N/11W-2J1	10-62		408	8.3	44 / 2.20	21 / 1.76	13 / 0.56	1.3 / 0.03	0 / 0.00	231 / 3.79	20 / 0.42	7.6 / 0.21	1.7 / 0.03	0.2 / 0.01	0.34	18		239	12	198	9	DWR
J. O. Rawn irrigation	13N/11W-7D1	10-62	62	314	8.1	21 / 1.05	24 / 2.01	8.4 / 0.37	0.5 / 0.01	0 / 0.00	188 / 3.08	11 / 0.23	5.0 / 0.14	1.3 / 0.02	0.6 / 0.03	0.3	24		179	11	153	0	USGS
S. Yoshino irrigation	13N/11W-18B3	10-62	62	330	8.2	23 / 1.15	20 / 1.67	17 / 0.74	0.9 / 0.02	0 / 0.00	184 / 3.02	12 / 0.25	7.4 / 0.21	9.7 / 0.16	0.3 / 0.02	1.5	19		190	21	141	0	USGS

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: NC ppm	Analyzed by c
	MDB&M							SANEL VALLEY (1-16) (Cont.)															
J. H. Pomroy & Co. irrigation	13N/11W-18D1	10-62	63	194	8.1	17 / 0.85	10 / 0.83	7.1 / 0.31	0.9 / 0.02	0 / 0.00	106 / 1.74	9.0 / 0.19	4.2 / 0.12	1.6 / 0.03	0.7 / 0.03	0.4	16		115	15	84	0	USGS
Hopland Public Utility District municipal	13N/11W-19N1	10-62		261	8.0	14 / 0.70	15 / 1.26	17 / 0.74	0.4 / 0.01	0 / 0.00	135 / 2.21	1.0 / 0.02	14 / 0.39	6.7 / 0.11	0.8 / 0.04	0.0	40		172	27	98	0	USGS
Grace Ranch domestic, stock and irrigation	13N/11W-30H1	10-62		309	8.1	24 / 1.20	19 / 1.58	10 / 0.44	2.0 / 0.05	0 / 0.00	168 / 2.75	14 / 0.29	7.5 / 0.21	2.0 / 0.03	0.7 / 0.04	0.3	16		177	13	139	1	USGS

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
						SAN FRANCISCO BAY REGION (NO. 2)																	
	MDB&M					PETALUMA VALLEY (2-1)																	
H. Cloakie domestic and stock	3N/6W-1Q1	10-25-62		1270									165 / 4.65										DWR
		4-17-63		1300	8.9	28 / 1.40	30 / 2.50	225 / 9.80	6.0 / 0.15	42 / 1.40	500 / 8.20	0 / 0.00	145 / 4.10	7.4 / 0.12	0.1 / 0.01	0.3	33		792	70	185	0	LL
O. Waite domestic and irrigation	3N/6W-3C1	10-29-62		7430									2270 / 64.01										DWR
		4-17-63		3700	8.4	117 / 5.85	201 / 16.50	365 / 15.87	21 / 0.56	12 / 0.40	448 / 7.35	0 / 0.00	1080 / 30.46	9.6 / 0.15	0.1 / 0.01	0.4	28		2480	41	1118	730	LL
S. K. Herzog Co. domestic and stock	3N/6W-11B1	10-62		1920									369 / 10.40										DWR
		4-17-63		1900	8.4	60 / 2.98	27 / 2.21	325 / 14.13	7.0 / 0.18	6.0 / 0.20	555 / 9.10	0 / 0.00	346 / 9.75	11 / 0.18	0.1 / 0.01	0.4	37		1080	73	265	0	LL
C. Strozzi stock	3N/6W-15M1	9-25-62	67	193									18 / 0.51						121				DWR
		5-8-63	56	365	7.2	42 / 2.09	5.9 / 0.48	22 / 0.95	0.4 / 0.02	0 / 0.00	116 / 1.90	35 / 0.73	28 / 0.80	0 / 0.00	0.2 / 0.01	0.1	21		220	27	128	38	LL
Rupprecht domestic, stock, and irrigation	3N/6W-18M1	9-26-62		610									52 / 1.47	13 / 0.21					394				DWR
		5-8-63		700	7.8	39 / 1.93	51 / 4.15	29 / 1.25	0.1 / 0.01	0 / 0.00	168 / 2.75	43 / 0.91	50 / 1.40	130 / 2.10	0.1 / 0.01	0.1	16		510	17	304	166	LL
Earl Johnson domestic	3N/7W-14F1	9-26-62		658									73 / 2.06						370				DWR
		5-8-63		670	8.2	30 / 1.47	30 / 2.48	71 / 3.10	0.6 / 0.02	0 / 0.00	246 / 4.03	34 / 0.71	76 / 2.15	1.0 / 0.02	0.3 / 0.02	0.7	24		382	44	197	0	LL
Lopez domestic	4N/6W-7H1	10-26-62		984									50 / 1.41										DWR
		4-4-63		1120	8.5	65 / 3.26	67 / 5.53	94 / 4.10	1.4 / 0.04	15 / 0.50	580 / 9.50	34 / 0.68	60 / 1.70	31 / 0.50	0.2 / 0.01	2.0	18		718	32	439	0	LL
Lopez irrigation and stock	4N/6W-7H2	10-26-62		4480									1120 / 31.58										DWR
		4-4-63		4800	8.2	175 / 8.76	7.9 / 0.65	930 / 40.43	4.3 / 0.11	0 / 0.00	433 / 7.10	308 / 6.43	1260 / 35.53	7.6 / 0.12	0.2 / 0.01	2.0	15		2880	81	470	115	LL

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MDB&M							PETALUMA VALLEY (2-1) (Cont.)															
I. A. Bourke domestic and stock	4N/6W-21Q1	10-29-62		1060									152 / 4.29										DWR
		4-4-63		890	8.6	3.0 / 0.15	5.9 / 0.49	195 / 8.47	1.0 / 0.03	15 / 0.50	345 / 5.65	10 / 0.21	97 / 2.72	0 / 0.00	0.1 / 0.01	0.8	34		524	93	32	0	LL
J. K. Herzog Co. dairy and stock	4N/6W-27R1	10-25-62		372									19 / 0.54										DWR
		4-17-63		440	8.4	36 / 1.78	24 / 2.00	16 / 0.70	2.4 / 0.06	4.5 / 0.15	230 / 3.77	16 / 0.35	12 / 0.33	3.9 / 0.06	0.6 / 0.03	0.1	17		278	15	189	0	LL
W. White irrigation and stock	4N/6W-33R1	10-29-62		5560									1720 / 48.50										DWR
		4-17-63		5500	8.1	197 / 9.85	307 / 25.25	463 / 20.13	19 / 0.50	0 / 0.00	284 / 4.65	1.4 / 0.03	1773 / 50.00	8.3 / 0.13	0.1 / 0.01	0.4	25		3440	36	1755	1522	LL
Union Oil Co. industrial	4N/7W-2D1	10-26-62		23800									9700 / 273.54										DWR
		4-4-63		23000	7.6	266 / 13.25	2085 / 171.50	2800 / 102.17	45 / 1.15	0 / 0.00	98 / 1.60	1020 / 21.24	9620 / 271.28	0 / 0.00	0.1 / 0.01	0.7	25		18100	35	9238	9158	LL
I. Riebli domestic and stock	5N/6W-30D1	10-26-62		932									105 / 2.96										DWR
		4-4-63		850	8.5	37 / 1.86	24 / 1.99	135 / 5.87	1.8 / 0.05	15 / 0.50	342 / 5.60	11 / 0.23	114 / 3.20	0 / 0.00	0.2 / 0.01	0.5	14		580	60	192	0	LL
N. J. Matzen domestic	5N/7W-8D3	10-26-62		935									161 / 4.54										DWR
		4-4-63		900	8.5	64 / 3.22	33 / 2.67	75 / 3.25	3.9 / 0.10	12 / 0.40	229 / 3.75	29 / 0.61	153 / 4.30	0 / 0.00	0.1 / 0.01	0.1	21		560	35	295	87	LL
Oberg Lumber Co. domestic	5N/7W-19A1	11-29-62		549									45 / 1.27										DWR
		4-4-63		540	8.4	36 / 1.77	9.1 / 0.74	67 / 2.90	2.6 / 0.07	3.0 / 0.10	217 / 3.55	29 / 0.60	43 / 1.20	0 / 0.00	0.1 / 0.01	0.1	25		334	53	126	0	LL
Al's Barber Shop domestic	5N/7W-20L3	10-29-62		1910									441 / 12.44										DWR
		4-4-63		1700	8.4	200 / 10.00	28 / 2.29	107 / 4.65	2.3 / 0.06	6.0 / 0.20	186 / 3.05	34 / 0.69	390 / 11.00	110 / 1.78	0.1 / 0.01	0.1	41		1100	27	615	453	LL

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: NC ppm	Analyzed by c
	MDB&M							PETALUMA VALLEY (2-1) (cont'd)															
[illegible] irrigation and [illegible]	6N/5W-26E1	10-26-62		585	8.0	41 / 2.05	17 / 1.43	64 / 2.78	2.0 / 0.05	0 / 0.00	282 / 4.62	21 / 0.44	46 / 1.30	1.3 / 0.02	0.5 / 0.03	0.0	24		353	44	174	0	DWR
[illegible]	6N/5W-34E2	10-26-62		848									69 / 1.94										DWR
		[illegible]-63		880	9.0	4.2 / 0.21	4.4 / 0.37	197 / 8.55	1.5 / 0.04	24 / 0.80	351 / 5.75	19 / 0.40	68 / 1.92	0 / 0.00	0.2 / 0.01	0.3	21		534	93	29	0	LL
[illegible]	[illegible]	10-26-62		589	8.3	46 / 2.30	29 / 1.98	36 / 1.57	2.7 / 0.07	5 / 0.17	224 / 3.67	17 / 0.35	36 / 1.30	12 / 0.27	0.4 / 0.02	0.0	67		391	27	214	22	DWR
		[illegible]-63		700	8.4	57 / 2.86	30 / 2.51	39 / 1.70	3.6 / 0.09	9.0 / 0.30	284 / 4.65	20 / 0.42	45 / 1.25	22 / 0.35	0.1 / 0.01	0.1	52		456	24	269	22	LL
								NAPA-SONOMA VALLEY (2-2)															
[illegible]	6N/5W-18G1	9-19-62		1160				96 / 4.18					138 / 3.89	28 / 0.45		0.24							DWR
		5-7-63		1000	8.6	79 / 3.94	36 / 3.00	86 / 3.74	1.5 / 0.04	1.5 / 0.50	347 / 5.69	37 / 0.77	126 / 3.55	5.0 / 0.08	0.4 / 0.02	0.1	27		563	35	347	38	USGS
[illegible]	6N/3W-18G2	9-19-62		1500				118 / 5.13					177 / 4.99	169 / 2.72		0.19							DWR
		5-7-63		1680									174 / 4.91	194 / 3.13									DWR
[illegible]	6N/4W-20J1	9-19-62		782				59 / 2.57					98 / 2.76			0.20							DWR
		5-7-63		776	8.0	24 / 3.69	18 / 1.51	58 / 2.52	1.2 / 0.03	0 / 0.00	162 / 2.66	107 / 2.23	97 / 2.74	0.2 / 0.00	0.2 / 0.01	0	35		537	33	260	127	USGS
[illegible]	[illegible]	9-19-62		240				42 / 1.83					32 / 0.90			0.14							DWR
		5-8-63		303	8.0	9.6 / 0.48	6.8 / 0.56	41 / 1.78	1.3 / 0.03	0 / 0.00	87 / 1.43	12 / 0.25	29 / 0.82	20 / 0.32	0.1 / 0.01	0	51		219	62	52	0	USGS
[illegible]	[illegible]	5-8-63		760									90 / 2.54										DWR
[illegible]	[illegible]	9-19-62		>12				70 / 3.04					97 / 2.74			0.12							DWR
		5-8-63		>85	8.0	16 / 0.80	14 / 1.15	74 / 3.22	1.0 / 0.03	0 / 0.00	126 / 2.07	10 / 0.21	105 / 2.96	0.1 / 0.00	0 / 0.00	0	49		330	62	97	0	USGS

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: NC ppm	Analyzed by c
	MDB&M					NAPA-SONOMA VALLEY (2-2) (Cont.)																	
P. F. [illegible] domestic and stock	4N/4W-12M1	9-19-62		875				77 / 3.35					101 / 2.85			0.12							DWR
		5-7-63		953	8.4	96 / 4.79	17 / 1.37	81 / 3.52	0.8 / 0.02	4 / 0.13	260 / 4.26	5.5 / 1.15	123 / 3.47	24 / 0.39	0.4 / 0.02	0	41		639	46	308	86	USGS
Jacobs stock	4N/4W-13E1	9-19-62		2040				206 / 8.96					362 / 10.21			0.27							DWR
V. Bassham domestic	4N/4W-14C2	9-19-62		1560				143 / 6.22					322 / 9.08			0.23							DWR
		5-7-63		1580	7.9	103 / 5.14	47 / 3.90	146 / 6.35	1.6 / 0.04	0 / 0.00	332 / 5.44	37 / 0.77	311 / 8.77	3.8 / 0.06	0.2 / 0.01	0	36		1010	41	452	180	USGS
B. Mini domestic and stock	4N/4W-25K1	7-7-63		445	8.4	20 / 1.00	30 / 2.43	29 / 1.26	1.7 / 0.04	6 / 0.20	188 / 3.08	16 / 0.37	29 / 0.82	12 / 0.19	0 / 0.00	0.1	27		259	27	172	8	DWR
U. S. Navy municipal	4N/5W-14D2	10-25-62		947									123 / 3.47			0.19							DWR
		4-2-63		948	8.6	11 / 0.55	9.8 / 0.81	182 / 7.92	3.2 / 0.08	13 / 0.43	278 / 4.56	41 / 0.85	118 / 3.33	2.3 / 0.04	0.2 / 0.01	0	82		617	85	68	0	LL
Sonoma Ranch stock	4N/5W-32B1	10-25-62		3630									930 / 26.23	23 / 0.37		2.4							DWR
		4-17-63		2600	8.5	40 / 1.99	50 / 4.06	479 / 20.43	14 / 0.37	15 / 0.50	509 / 8.35	0 / 0.00	621 / 17.50	9.6 / 0.15	0.1 / 0.01	2.3	44		1460	56	303	0	LL
Sonoma Ranch stock	4N/5W-34D1	10-25-62		2900									671 / 18.92	0.9 / 0.01		2.2							DWR
M. L. George domestic	5N/4W-9Q2	9-18-62	65	488				59 / 2.57					45 / 1.27			0.19							DWR
		5-7-63		507	8.2	27 / 1.35	15 / 1.25	62 / 2.70	0.8 / 0.02	0 / 0.00	235 / 3.85	9.2 / 0.19	44 / 1.24	1.0 / 0.02	0.5 / 0.03	0.1	37		311	61	130	0	USGS
W. Gellenger domestic	5N/4W-11F3	9-18-62		680				113 / 4.92					92 / 2.59			2.2							DWR
		5-7-63		545	8.1	15 / 0.75	7.8 / 0.64	83 / 3.61	3.1 / 0.08	0 / 0.00	164 / 2.69	18 / 0.37	66 / 1.86	7.8 / 0.13	0.4 / 0.02	1.3	54		336	71	70	0	USGS

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MDB&M																						
						NAPA-SONOMA VALLEY (2-2) (Cont.)																	
P. A. Gasser domestic and stock	4N/4W-14C1	9-18-62		230				17 / 0.74					17 / 0.48			0.13							DWR
		5-7-63		257	7.9	15 / 0.75	12 / 0.96	19 / 0.83	2.5 / 0.06	0 / 0.00	112 / 1.84	5.2 / 0.11	21 / 0.59	3.5 / 0.06	0.2 / 0.01	0	62		195	32	85	0	USGS
John Beal domestic	5N/4W-15E1	9-18-62		451				51 / 2.22					49 / 1.38			0.16							DWR
		5-7-63		410	8.1	20 / 1.00	13 / 1.06	50 / 2.18	2.7 / 0.07	0 / 0.00	200 / 3.28	0.6 / 0.01	35 / 0.99	3.1 / 0.05	0.3 / 0.02	0.1	47		277	51	103	0	USGS
E. D. Looney domestic	5N/4W-20B2	5-8-63		608									82 / 2.31										USGS
A. E. Pos domestic	5N/4W-21P2	9-19-62		2340				448 / 19.49					476 / 13.42			0.49							DWR
		5-8-63		2210	8.4	30 / 1.50	11 / 0.87	432 / 18.79	7.4 / 0.19	8 / 0.27	342 / 5.61	141 / 2.94	420 / 11.85	2.7 / 0.04	0.1 / 0.01	0.5	28		1280	88	119	0	USGS
Stewart's Dairy stock	5N/4W-22M1	9-19-62	72	674				94 / 4.09					58 / 1.64			0.72							DWR
Napa State Hospital irrigation	5N/4W-23G2	9-19-62		245	8.2	15 / 0.74	16 / 1.26	10 / 0.43	1.6 / 0.04	0 / 0.00	120 / 1.97	9.2 / 0.19	7.7 / 0.22	0.0 / 0.00	0.1 / 0.01	0.1	17		158	17	100	2	DWR
E. Flanagan domestic	5N/4W-29H1	5-8-63		374									26 / 0.73										DWR
E. Ferringmar domestic	5N/5W-18D2	10-24-62		516									35 / 0.99	51 / 0.82		0.13							DWR
		4-2-63		422	8.4	14 / 0.70	14 / 1.14	61 / 2.65	1.7 / 0.04	8 / 0.27	200 / 3.28	9.0 / 0.19	23 / 0.65	7.1 / 0.11	0.3 / 0.02	0.7	4		302	58	92	0	USGS
E. Miglioretti domestic and irrigation	5N/5W-20R1	4-2-63		1080	8.6	24 / 1.20	10 / 0.86	218 / 9.48	2.0 / 0.05	22 / 0.73	455 / 7.46	22 / 0.46	102 / 2.88	0.8 / 0.01	0 / 0.00	3.8	20		627	82	103	0	USGS
E. E. Seale domestic and stock	5N/6E-12F1	10-24-62		450									28 / 0.79			0.23							USGS
		4-3-63		398	8.3	18 / 0.90	15 / 1.22	50 / 2.18	1.8 / 0.05	6 / 0.20	196 / 3.21	7.6 / 0.16	24 / 0.68	1.3 / 0.02	0 / 0.00	0.4	26		272	61	106	0	USGS

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: NC ppm	Analyzed by c
	MDB&M					SAPA-SONOMA VALLEY (2-2) (Cont.)																	
P. Kiser irrigation	5N/6W-24K1	10-24-62		205									8.4 / 0.24			0.18							DWR
		4-2-63		339	8.2	28 / 1.40	15 / 1.20	18 / 0.78	1.4 / 0.04	0 / 0.00	135 / 2.21	4.0 / 0.08	31 / 0.87	11 / 0.18	0 / 0.00	0	71		271	23	130	19	USGS
Connils domestic	5N/6W-25P1	10-26-62		505									71 / 2.00			0.12							DWR
		4-2-63		512	7.4	31 / 1.55	17 / 1.38	45 / 1.87	2.4 / 0.06	0 / 0.00	161 / 2.64	8.0 / 0.17	72 / 2.03	2.8 / 0.05	0 / 0.00	0	83		330	38	146	14	USGS
E. L. Johnson domestic and stock	6N/5W-13Q1	9-18-62		264				32 / 1.39					9.8 / 0.28			0.21							DWR
		2-8-63		259	8.1	14 / 0.70	5.8 / 0.48	30 / 1.30	4.5 / 0.12	0 / 0.00	115 / 1.88	14 / 0.29	8.0 / 0.23	11 / 0.18	0.2 / 0.01	0.1	54		200	50	59	0	USGS
W. Tatvid domestic	6N/6W-23M2	10-24-62		449									63 / 1.78			1.4							DWR
		4-3-63		500	8.4	11 / 0.55	10 / 0.81	74 / 3.20	12 / 0.31	4.2 / 0.14	166 / 2.71	0 / 0.00	76 / 2.15	0 / 0.00	1.0 / 0.05	1.3	64		350	66	68	0	LL
[illegible] domestic	6N/6W-26D1	10-24-62		442									27 / 0.76		0.2 / 0.01	0.56							DWR
		4-3-63		400	8.3	1.0 / 0.05	2.1 / 0.17	82 / 3.55	9.2 / 0.24	2.4 / 0.08	140 / 2.30	6.2 / 0.13	55 / 1.55	0 / 0.00	1.0 / 0.05	1.9	52		292	89	11	0	LL
S. Farrant domestic	7N/5E-30H1	9-18-62		104				7.0 / 0.30					6.6 / 0.19			0.09							DWR
		4-8-63		77	7.7	3.3 / 0.26	3.3 / 0.27	4.2 / 0.18	1.2 / 0.03	0 / 0.00	27 / 0.44	4.4 / 0.09	6.8 / 0.19	1.5 / 0.02	0.1 / 0.01	0	26		72	24	26	4	USGS
R. Wheeler domestic and stock	7N/5E-8A6	9-18-62		322				20 / 0.87					17 / 0.48			0.40							DWR
		4-8-63		475	8.3	39 / 1.94	28 / 2.31	17 / 0.74	2.2 / 0.13	2 / 0.07	199 / 3.26	41 / 0.85	18 / 0.51	14 / 0.31	0.1 / 0.01	0.3	24		311	14	213	47	USGS
R. Studebaker domestic	8N/6E-32C1	4-8-63		422	7.8	14 / 0.70	13 / 1.08	57 / 2.48	2.0 / 0.18	0 / 0.00	248 / 4.06	0.0 / 0.00	13 / 0.37	2.0 / 0.04	0.4 / 0.02	0.62	100		347	56	89	0	DWR
Connell domestic	8N/6E-32G1	4-8-63		681	8.2	40 / 2.00	39 / 3.21	33 / 1.44	7.2 / 0.18	0 / 0.00	198 / 3.24	61 / 1.27	65 / 1.83	30 / 0.48	0.3 / 0.02	0.44	43		483	24	261	99	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MDB&M																						
						NAPA-SONOMA VALLEY (2-2) (Cont.)																	
J. Alcouffe domestic and stock	9N/6W-31Q1	9-18-62		152				13 / 0.56					8.6 / 0.24			0.14							DWR
		5-8-63		109	6.7	8.7 / 0.43	3.3 / 0.27	7.5 / 0.33	0.8 / 0.02	0 / 0.00	41 / 0.67	8.8 / 0.18	4.2 / 0.12	4.7 / 0.08	0.1 / 0.01	0	36		112	31	35	1	USGS
R. H. Archerd domestic	9N/7W-25N1	9-18-62		927				165 / 7.18					186 / 5.24			1.2							DWR
		5-8-63		860	8.4	1.2	5.0	152 / 6.61	8.8 / 0.23	2 / 0.07	183 / 3.00	0.2 / 0.00	159 / 4.49	2.8 / 0.05	5.3 / 0.28	9.6	60		522	84	51	0	USGS
						SUISUN-FAIRFIELD VALLEY (2-3)																	
Mrs. Taylor domestic	3N/1E-4B1	9-25-62		1400				114 / 4.96					257 / 7.25										DWR
		5-9-63		1210	8.5	53 / 2.64	65 / 5.34	100 / 4.35	1.4 / 0.04	15 / 0.50	292 / 4.79	17 / 0.35	197 / 5.56	44 / 0.71	0.8 / 0.04	0.6	28		730	35	399	135	USGS
McDougal Livestock Co. stock	3N/1E-21D1	5-9-63		1800				412 / 17.92					183 / 5.16										DWR
McDougal Livestock Co. domestic	3N/1E-22F2	9-25-62		1770				307 / 13.35					280 / 7.90										DWR
		5-9-63		1650	8.5	24 / 1.21	27 / 2.21	305 / 13.25	1.4 / 0.04	15 / 0.50	476 / 7.80	63 / 1.33	232 / 6.55	33 / 0.53	0.4 / 0.02	3.4	17		1070	79	171	0	LL
McDougal Livestock Co irrigation and stock	3N/1E-22F3	9-25-62		1710				300 / 13.05					247 / 6.96										DWR
Fish & Game Commission domestic	4N/1W-33A1	9-25-62		3630				334 / 14.53					825 / 23.26										DWR
		5-9-63		3600	8.6	55 / 2.75	51 / 4.15	700 / 30.43	2.3 / 0.06	24 / 0.80	243 / 3.90	142 / 2.97	860 / 24.25	0 / 0.00	0.2 / 0.01	14	19		2200	81	345	0	LL
Guy Stewart domestic	4N/1E-8F1	9-25-62		997				123 / 5.35					160 / 4.51										DWR
		5-9-63		2250	8.0	86 / 4.29	77 / 6.30	248 / 10.79	7.5 / 0.19	0 / 0.00	239 / 3.92	88 / 1.83	535 / 15.06	13 / 0.21	0.5 / 0.03	0.9	69		1570	60	530	334	LL

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: NC ppm	Analyzed by c
	MDB&M					SUISUN-FAIRFIELD VALLEY (2-3) (Cont.)																	
W. F. Healy domestic	4N/2W-4D1	5-8-63		1340	8.0	125 / 6.23	34 / 2.78	150 / 6.50	0.05 / 0.00	0 / 0.00	625 / 10.25	145 / 3.02	67 / 1.90	28 / 0.45	2.0 / 0.10	1.0	13		952	42	450	0	LL
Southern Pacific R.R. domestic	4N/2W-5Q2	9-25-62		378				43 / 1.87					42 / 1.18										DWR
		5-8-63		380	7.5	16 / 0.80	8.5 / 0.70	50 / 2.17	2.4 / 0.06	0 / 0.00	155 / 2.55	0 / 0.00	39 / 1.10	0 / 0.00	0.1 / 0.01	0.4	60		260	57	75	0	LL
F. P. Smith domestic and stock	4N/2W-18M1	9-25-62		1120				89 / 3.87					114 / 3.21										DWR
		5-8-63		1100	8.2	93 / 4.66	44 / 3.57	93 / 4.05	0.1 / 0.01	0 / 0.00	403 / 6.60	124 / 2.58	98 / 2.75	10 / 0.16	0.2 / 0.01	0.7	22		708	33	412	82	LL
D. E. Mangels irrigation	4N/3W-13G2	9-25-62		1070				103 / 4.48					79 / 2.23										DWR
		5-8-63		840	8.2	44 / 2.20	42 / 3.46	87 / 3.80	1.3 / 0.03	0 / 0.00	349 / 5.72	86 / 1.80	62 / 1.75	1.5 / 0.02	0.2 / 0.01	0.6	14		518	40	283	0	LL
H. J. Beck domestic	5N/2W-27J4	9-25-62		772				71 / 3.09					50 / 1.41										DWR
		5-8-63		870	8.3	71 / 3.54	39 / 3.19	73 / 3.17	0.2 / 0.01	4.8 / 0.16	428 / 7.02	38 / 0.81	45 / 1.25	30 / 0.49	0.4 / 0.02	1.1	22		546	32	336	0	LL
domestic	5N/2W-34N1	9-25-62		1860				236 / 10.27					184 / 5.19										DWR
		5-8-63		1640	7.8	80 / 4.32	57 / 4.71	213 / 9.25	0.2 / 0.01	0 / 0.00	575 / 9.43	249 / 5.18	108 / 3.05	21 / 0.34	0.6 / 0.03	1.9	13		1080	51	451	0	LL
Morris Tract domestic	5N/2W-34P4	9-25-62		1500				202 / 8.79					58 / 1.64										DWR
		5-8-63		1540	8.1	97 / 4.83	46 / 3.78	223 / 9.70	0.2 / 0.01	0 / 0.00	720 / 11.80	144 / 3.00	66 / 1.85	91 / 1.40	0.4 / 0.02	1.6	16		1060	53	430	0	LL
						PITTSBURG PLAIN (2-4)																	
Continental Can Co. domestic	2N/1E-7R2	6-6-63		3200	8.0	160 / 8.00	119 / 9.76	415 / 18.05	12 / 0.31	0 / 0.00	223 / 3.65	643 / 13.43	698 / 18.55	0 / 0.00	0.2 / 0.01	0.7	44		2160	50	888	706	DWR
Dow Chemical Co. irrigation	2N/1E-22G1	6-6-63	69	1480	8.0			182 / 7.92			330 / 5.41		107 / 3.02							47	441		DWR
Fibreboard Products domestic	2N/2E-20A1	6-6-63	68	1290	8.3	60 / 3.02	54 / 4.41	175 / 7.60	4.8 / 0.12	6.0 / 0.20	293 / 4.80	140 / 2.93	236 / 6.66	27 / 0.44	0.1 / 0.01	0.6	44		891	50	372	122	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: NC ppm	Analyzed by c
	MDB&M							CLAYTON VALLEY (2-5)															
G. Curletto irrigation and domestic	1N/1W-4A1	7-11-62		658	7.5	51 / 2.54	40 / 3.33	28 / 1.22	0.8 / 0.02	0 / 0.00	287 / 4.70	64 / 1.33	27 / 0.76	12 / 0.19	0.1 / 0.00	0.37	29		386	17	294	59	DWR
S. H. Cowell Foundation industrial and domestic	1N/1W-4R1	7-11-62	65	1130	7.7	69 / 3.44	52 / 4.29	83 / 3.61	0.7 / 0.02	0 / 0.00	284 / 4.65	53 / 1.10	173 / 4.88	28 / 0.45	0.3 / 0.02	0.36	36		686	32	387	154	DWR
Fred Baker domestic	2N/1W-30J1	7-10-62		1120	7.5	93 / 4.64	65 / 5.37	62 / 2.70	0.7 / 0.02	0 / 0.00	498 / 8.16	124 / 2.58	54 / 1.52	21 / 0.34	0.2 / 0.01	0.53	34		698	21	501	93	DWR
Jack Disbrow domestic	2N/1W-30K1	7-10-62		424	8.0	29 / 1.45	12 / 1.03	35 / 1.52	2.1 / 0.05	0 / 0.00	110 / 1.80	44 / 0.92	45 / 1.27	0.6 / 0.01	0.2 / 0.01	0.17	6.7		238	38	124	34	DWR
Frank Dorville domestic	2N/1W-31D1	7-10-62		898	8.3	84 / 4.19	46 / 3.80	34 / 1.48	0.7 / 0.02	0 / 0.00	279 / 4.57	72 / 1.50	88 / 2.48	28 / 0.77	0.2 / 0.01	0.26	31		553	16	400	171	DWR
R. B. Ogilvie domestic	2N/2W-13P1	7-10-62		777	8.2	31 / 1.55	25 / 2.07	91 / 3.96	1.1 / 0.03	0 / 0.00	230 / 3.77	48 / 1.00	97 / 2.74	6.8 / 0.11	0.4 / 0.02	0.31	33		440	52	181	0	DWR
E. A. Bertinoia domestic	2N/2W-26B1	7-10-62		414	8.0	26 / 1.30	13 / 1.04	35 / 1.52	2.1 / 0.05	0 / 0.00	101 / 1.66	46 / 0.96	47 / 1.32	0.7 / 0.01	0.1 / 0.00	0.13	5.4		214	39	11	34	DWR
J. D. Nailen domestic	2N/2W-36J1	7-11-62		1080	8.1	63 / 3.14	41 / 3.39	108 / 4.70	0.7 / 0.02	0 / 0.00	316 / 5.18	96 / 2.00	121 / 3.41	36 / 0.58	0.3 / 0.02	0.37	32		655	42	327	68	DWR
								YGNACIO VALLEY (2-6)															
A. Sebastiani domestic	1N/1W-7K1	7-11-62		2140	8.0	111 / 5.54	70 / 5.75	266 / 11.57	1.6 / 0.04	0 / 0.00	442 / 7.24	491 / 10.22	203 / 5.72	15 / 0.24	0.5 / 0.03	1.2	24		1450	51	565	203	DWR
M. E. Davis domestic	1N/1W-29G1	7-11-62		2080	7.9	127 / 6.34	74 / 6.05	224 / 9.74	1.1 / 0.03	0 / 0.00	504 / 8.26	235 / 4.89	316 / 8.91	18 / 0.29	0.9 / 0.05	1.1	20		1280	44	620	207	DWR
Chester Hook irrigation	1N/2W-11N1	7-11-62		984	8.2	37 / 1.85	31 / 2.55	129 / 5.61	2.6 / 0.07	0 / 0.00	364 / 5.96	23 / 0.48	126 / 3.55	0.2 / 0.00	0.3 / 0.02	1.6	41		555	56	220	0	DWR
John Wells domestic and irrigation	1N/2W-13P1	7-11-62		1560	7.7	107 / 5.34	77 / 6.37	129 / 5.61	0.7 / 0.02	0 / 0.00	594 / 9.74	119 / 2.48	151 / 4.26	41 / 0.66	0.5 / 0.03	1.8	30		947	32	586	99	DWR
F. H. Dunham domestic	2N/2W-27R1	7-10-62		1780	8.3	29 / 1.45	38 / 3.15	301 / 13.09	3.8 / 0.10	0 / 0.00	488 / 8.00	67 / 1.39	301 / 8.49	0.7 / 0.01	0.2 / 0.01	6.3	43		998	74	230	0	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by[c]
	MDB&M																						
								SAN IGNACIO VALLEY (2-6) (Cont.)															
A. Buscaglia domestic	2N/2W-36L1	7-10-62		3220	7.9	236 / 11.78	156 / 12.80	250 / 10.88	0.9 / 0.02	0 / 0.00	574 / 9.41	414 / 8.62	534 / 15.06	136 / 2.19	0.5 / 0.03	1.9	36		2170	31	1230	759	DWR
domestic	2N/2W-36L2	7-10-62		1650	7.9	119 / 5.94	93 / 7.67	106 / 4.61	1.4 / 0.04	0 / 0.00	614 / 10.06	36 / 0.75	241 / 6.80	1.9 / 0.03	0.2 / 0.01	0.50	25		956	25	681	178	DWR
								EAST BAY AREA OF SANTA CLARA VALLEY (2-9)															
Manass Block Tanning Co. industrial	1S/4W-4A1	6-17-63	67	1400	8.1	89 / 4.44	67 / 5.48	100 / 4.35	1.2 / 0.03	0 / 0.00	332 / 5.44	101 / 2.10	217 / 6.12	24 / 0.39	0.2 / 0.01	0.1	24		868	30	496	224	USGS
Red Star Yeast Co. industrial	1S/4W-34F2	6-17-63	68	994	8.6	36 / 1.80	28 / 2.32	129 / 5.61	6.8 / 0.17	8 / 0.27	256 / 4.20	18 / 0.37	160 / 4.51	8.9 / 0.14	0.0 / 0.00	0.1	42		558	57	206	0	USGS
General Metals industrial	2S/3W-21J1	6-18-63	68	6240	7.8	549 / 27.40	251 / 20.68	328 / 14.27	16 / 0.41	0 / 0.00	64 / 1.05	158 / 3.29	2020 / 56.98	18 / 0.29	0.0 / 0.00	0.3	36		3770	23	2400	1350	USGS
A. Ratto irrigation	2S/3W-28G1	6-18-63	66	777	8.3	53 / 2.64	19 / 1.56	86 / 3.74	4.3 / 0.11	2 / 0.07	260 / 4.26	46 / 0.96	90 / 2.54	0.5 / 0.01	0.0 / 0.00	0.3	37		454	46	210	0	USGS
Alameda Municipal Golf Course irrigation	2S/3W-30A	6-18-63		1380	8.3	115 / 5.74	35 / 2.86	103 / 4.48	7.8 / 0.20	2 / 0.07	242 / 3.87	35 / 0.73	292 / 8.24	0.9 / 0.01	0.0 / 0.00	0.3	36		836	34	430	228	USGS
Soares irrigation	2S/3W-30D2	6-18-63		4330	7.9	376 / 18.76	149 / 12.24	254 / 11.05	16 / 0.41	0 / 0.00	108 / 1.77	130 / 2.71	1290 / 36.39	0.9 / 0.01	0.0 / 0.00	0.3	36		2560	26	1550	1460	USGS
Hohener Packing Co. domestic and industrial	2S/3W-33H3	6-18-63		609	8.6	35 / 1.75	17 / 1.41	75 / 3.26	5.2 / 0.13	14 / 0.47	288 / 4.72	25 / 0.52	28 / 0.79	4.6 / 0.07	0.0 / 0.00	0.4	35		375	50	158	0	USGS
R. A. Zobel irrigation	2S/3W-34A2	6-18-63	65	795	8.5	70 / 3.49	38 / 3.15	44 / 1.91	2.7 / 0.07	14 / 0.47	284 / 4.65	55 / 1.15	43 / 1.21	58 / 0.94	0.0 / 0.00	0.3	30		501	22	332	76	USGS
J. A. Jacklich domestic	2S/3W-34D3	6-18-63		575	8.6	41 / 2.05	20 / 1.63	61 / 2.65	3.6 / 0.09	12 / 0.40	284 / 4.65	22 / 0.46	27 / 0.76	2.1 / 0.03	0.0 / 0.00	0.3	23		343	41	184	0	USGS
Alameda Naval Air Station municipal	2S/4W-3E1	6-18-63	69	765	8.7	35 / 1.75	18 / 1.47	100 / 4.35	1.4 / 0.04	12 / 0.40	266 / 4.36	32 / 0.67	86 / 2.43	2.1 / 0.03	0.1 / 0.01	0.2	29		468	57	161	0	USGS
Todd Ship Yards industrial	2S/4W-3F1	6-18-63	69	857	8.6	38 / 1.90	22 / 1.84	105 / 4.57	1.7 / 0.04	10 / 0.33	227 / 3.72	20 / 0.42	137 / 3.86	1.9 / 0.03	0.1 / 0.01	0.2	28		479	55	187	0	USGS

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MDB&M					EAST BAY AREA OF SANTA CLARA VALLEY (2-9) (Cont.)																	
Alameda High School domestic and irrigation	2S/4W-12R1	6-18-63	67	379	8.5	23 / 1.15	11 / 0.91	38 / 1.65	4.0 / 0.10	3 / 0.07	148 / 2.43	13 / 0.27	38 / 1.07	1.0 / 0.02	0.1 / 0.01	0.1	28		218	53	103	0	USGS
Hatto	2S/4W-23A1	6-18-63		816	8.8	33 / 2.15	15 / 1.21	116 / 7.05	2.3 / 0.06	19 / 0.64	265 / 4.34	46 / 0.96	91 / 2.57	1.4 / 0.03	0.1 / 0.01	0.3	26		470	68	168	0	USGS
Bayside Nursery irrigation	3S/2W-2H	6-20-63	65	787	8.4	40 / 1.50	36 / 2.98	70 / 3.04	4.2 / 0.11	6 / 0.20	142 / 2.33	95 / 1.98	83 / 2.34	51 / 0.82	0.6 / 0.03	0.4	39		496	68	224	98	USGS
Kruger & Sons industrial	3S/2W-19P4	6-20-63	64	1180	8.1	101 / 5.04	37 / 3.04	85 / 3.70	6.6 / 0.17	0 / 0.00	288 / 4.72	98 / 2.04	150 / 4.23	39 / 0.63	0.8 / 0.04	0.3	31		704	31	404	168	USGS
El Mateos irrigation	3S/2W-30L1A	6-20-63		1360	8.3	150 / 7.01	41 / 3.40	93 / 4.04	6.8 / 0.17	7.2 / 0.24	289 / 8.01	91 / 1.91	125 / 3.52	54 / 0.87	0.2 / 0.01	0.5	23		764	28	521	109	LL
Mount Eden Nurseries Co. domestic and irrigation	3S/2W-32D3	6-20-63	74	735	8.2	28 / 1.38	8.0 / 0.66	135 / 5.87	2.5 / 0.06	0 / 0.00	248 / 4.06	69 / 1.43	91 / 2.59	0.10 / 0.00	0.1 / 0.01	0.5	22		446	64	102	0	LL
Avansino Portenan Co. irrigation	3S/3E-16A	6-20-63		1000	8.3	38 / 1.90	20 / 1.62	148 / 6.44	7.2 / 0.18	3 / 0.07	336 / 5.51	54 / 1.12	116 / 3.27	0.46 / 0.01	0.1 / 0.01	0.2	37		585	64	170	0	USGS
Trojan Powder industrial	3S/3E-11R1	6-20-63	66	1200	8.2	82 / 4.09	2.3 / 0.19	172 / 7.48	3.0 / 0.08	0 / 0.00	250 / 4.08	37 / 0.77	245 / 6.91	0.4 / 0.01	0.2 / 0.01	0.55	13		626	63	234	141	LL
Camellia irrigation	3S/3E-13B2	6-20-63		1900	8.2	204 / 10.18	23 / 1.93	216 / 9.40	1.1 / 0.03	0 / 0.00	638 / 10.46	210 / 4.37	187 / 5.28	89 / 1.37	0.7 / 0.04	1.9	26		1200	44	606	83	LL
L. Harat domestic and stock	3S/3E-24Q2	6-20-63		2050	7.8	155 / 7.76	94 / 7.72	195 / 8.47	1.0 / 0.03	0 / 0.00	454 / 7.45	122 / 2.55	405 / 11.41	141 / 2.27	0.2 / 0.01	0.6	24		1390	39	774	402	LL
Silacci Bros. irrigation	4S/3E-7E2	9-14-63		858									58 / 1.64										
Sudden	4S/3E-23J1	9-17-63		978									79 / 2.23	43 / 0.69									
Silacci & Sons Bros. domestic and irrigation	4S/3E-27E3	9-7-63		827									74 / 1.92										
W. Trotter irrigation	4S/3E-34P3	9-9-63		1140	8.2	113 / 5.74	43 / 3.65	64 / 2.78	2.3 / 0.06	0 / 0.00	328 / 4.38	107 / 2.23	140 / 4.23	23 / 0.37	0.2 / 0.01	0.46	20		671	34	470	208	LL
		9-10-63		1420									227 / 6.39										

TABLE E-1

ANALYSES OF GROUND WATER

1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: NC ppm	Analyzed by[c]
	MDB&M					EAST BAY AREA OF SANTA CLARA VALLEY (2-9) (Cont.)																	
J. M. Enos domestic and irrigation	4S/1W-18D1	9-62		709	8.2	35 / 1.75	40 / 3.33	53 / 2.31	1.7 / 0.04	0 / 0.00	191 / 3.13	68 / 1.42	76 / 2.14	27 / 0.44	0.1 / 0.01	0.2	21		434	31	254	97	USGS
		5-7-63		1060									96 / 2.71										DWR
Pacific States Steel Company industrial	4S/1W-18G1	5-7-63		1550									245 / 6.91										DWR
American Forge Co. industrial	4S/1W-18H3	5-7-63		2430									635 / 17.91										DWR
M. Rose domestic and irrigation	4S/1W-18H7	9-62		3980	7.5	374 / 18.66	184 / 15.14	108 / 4.70	4.1 / 0.10	0 / 0.00	51 / 0.84	23 / 0.48	1280 / 36.11	9.3 / 0.15	0.3 / 0.02	0.3	17		2500	12	1690	1650	USGS
		5-7-63		4830									1460 / 41.19										DWR
Santa Cruz-Portland Cement Co. irrigation	4S/1W-20D2	9-62		1290	8.5	135 / 6.74	50 / 4.13	46 / 2.00	2.4 / 0.06	8 / 0.27	255 / 4.18	66 / 1.37	246 / 6.94	12 / 0.19	0.1 / 0.00	0.44	17	ABS 0.0	695	15	544	322	DWR
		5-9-63		804									127 / 3.58										DWR
Niles Sand & Gravel industrial	4S/1W-20L1	5-17-63		720									84 / 2.37	4.4 / 0.07									DWR
Citizens Utilities Co. of California municipal	4S/1W-21F2	9-6-62		688	7.7	57 / 2.84	27 / 2.19	43 / 1.87	2.1 / 0.05	0 / 0.00	230 / 3.77	67 / 1.39	62 / 1.75	2.6 / 0.04	0.3 / 0.02	0.69	13	Cr^{+6} 0.00; Al 0.08; As 0.00; Cu 0.00; Pb 0.00; Mn 0.00; Zn 0.00; T.O. 70; Se 0.00; Cr 0.00 (Total); Fe 0.01 (Total); Phenols 0.000	431	27	252	63	DWR
		12-5-62	63	646	7.9	52 / 2.59	22 / 1.85	44 / 1.91	2.3 / 0.06	0 / 0.00	202 / 3.31	49 / 1.02	72 / 2.03	2.4 / 0.04	0.3 / 0.02	0.63	15	Cr^{+6} 0.00; Al 0.02; As 0.01; Cu 0.00; Pb 0.00; Mn 0.00; Zn 0.01; T.O. 1; Se 0.00; Cr 0.00 (Total); Fe 0.14 (Total); Phenols 0.000	371	30	222	56	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[a]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MDB&M					EAST BAY AREA OF SANTA CLARA VALLEY (2-9) (Cont.)																	
Citizens Utilities Co. of California municipal	4S/1W-21F2	3-7-63	65	757	8.3	60 / 2.99	28 / 2.30	53 / 2.30	2.2 / 0.06	0.00 / 0.00	220 / 3.60	67 / 1.39	88 / 2.48	8.4 / 0.14	0.3 / 0.02	0.59	17	Cr^{+6} 0.00 Al 0.00 As 0.00 Cu 0.01 Pb 0.00 Mn 0.00 Zn 0.00 T.O. 1 Se 0.00 Cr 0.00 (Total) Fe 0.00 (Total) Phenols 0.000 ABS 0.0	503	30	265	85	DWR
		5-17-63		790									80 / 2.26	4.8 / 0.08									DWR
		6-6-63		720	8.1	77 / 3.84	18 / 1.45	48 / 2.09	3.3 / 0.06	0 / 0.00	227 / 3.72	77 / 1.60	68 / 1.92	6.2 / 0.10	0.3 / 0.02	0.58	14	Cr^{+6} 0.00 ABS 0.0 Al 0.00 As 0.00 Cu 0.00 Pb 0.00 Mn 0.00 Zn 0.02 T.O. 1 Se 0.00 Cr 0.00 (Total) Fe 0.00 (Total) Phenols 0.000	412	28	265	79	DWR
H. J. Kaiser Co. industrial	4S/1W-21M1	9-6-62		702	7.8	61 / 3.04	28 / 2.33	42 / 1.83	1.9 / 0.05	0 / 0.00	254 / 4.16	85 / 1.77	48 / 1.35	1.7 / 0.03	0.2 / 0.01	0.60	16	Cr^{+6} 0.00 Al 0.10 As 0.00 Cu 0.00 Pb 0.00 Mn 0.00 Zn 0.01 T.O. 50 Se 0.00 Cr 0.00 (Total) Fe 0.02 (Total) Phenols 0.000	431	25	269	61	DWR
		12-5-62	62	711	8.1	64 / 3.19	28 / 2.32	44 / 1.91	2.1 / 0.05	0 / 0.00	266 / 4.36	85 / 1.77	49 / 1.38	1.7 / 0.03	0.3 / 0.02	0.62	18	Cr^{+6} 0.00 Al 0.00 As 0.00 Pb 0.00 Mn 0.00 Zn 0.09 Se 0.00 T.O. 1 Cu 0.00 Cr 0.00 (Total) Fe 0.02 (Total) Phenols 0.000	421	26	276	58	DWR
		3-7-63	64	644	8.2	49 / 2.44	29 / 2.42	45 / 1.96	1.8 / 0.05	0.00 / 0.00	222 / 3.64	82 / 1.71	54 / 1.52	1.9 / 0.03	0.1 / 0.00	0.58	16	Cr^{+6} 0.00 Al 0.00 As 0.00 Cu 0.00 Pb 0.00 Mn 0.00 Zn 0.00 T.O. 2 Se 0.00 Cr 0.01 (Total) ABS 0.00	391	28	243	61	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by[e]
	[illegible]					LAST BAY AREA OF SANTA CLARA VALLEY (2-9) (Cont.)																	
H. T. Patser Co. industrial	4S/1W-21H1	5-17-63		728									54 / 1.52	4.0 / 0.03									DWR
		6-6-63		739	8.0	73 / 3.64	27 / 2.21	42 / 1.83	2.0 / 0.05	0 / 0.00	258 / 4.23	81 / 1.69	62 / 1.75	2.2 / 0.04	0.3 / 0.02	0.63	17	Cr^{+6} 0.00 Al 0.00 As 0.00 Cu 0.10 Pb 0.00 Mn 0.00 Zn 0.01 F 0.4 Se 0.00 Cr 0.00 (Total) Fe 0.00 (Total) Phenols 0.000 ABS 0.0	423	24	293	81	DWR
A.C.W.D. municipal	4S/1W-21P6	5-17-63		734									63 / 1.78	4.8 / 0.08									DWR
M. Desalles irrigation and domestic	4S/1W-21R2	9-62		491	8.3	30 / 1.50	20 / 1.66	66 / 2.87	1.5 / 0.04	4 / 0.13	206 / 3.38	69 / 1.44	38 / 1.07	5.7 / 0.09	0.4 / 0.02	0.8	20	ABS 0.0	349	47	158	0	USGS
		5-9-63		729									45 / 1.27			0.93							DWR
A. J. Rezendes irrigation	4S/1W-22M2	9-62		1630	8.7	22 / 1.10	12 / 0.96	375 / 16.31	8.8 / 0.22	40 / 1.33	832 / 13.64	45 / 0.94	88 / 2.48	6.3 / 0.10	0.4 / 0.02	3.8	33	ABS 0.0	1020	88	103	0	DWR
		5-9-63		1310									72 / 2.03			4.0							DWR
J. S. Dutra domestic and irrigation	4S/1W-28B2	9-62		674	8.3	47 / 2.35	22 / 1.81	74 / 3.22	1.9 / 0.05	3 / 0.10	260 / 4.26	72 / 1.50	44 / 1.24	8.4 / 0.14	0.4 / 0.02	0.8	19	ABS 0.0	397	43	208	0	USGS
		5-8-63		826									43 / 1.21										DW
A.C.W.D. municipal	4S/1W-28C14	9-62		515	8.1	36 / 1.80	20 / 1.66	43 / 1.87	2.0 / 0.05	0 / 0.00	194 / 3.18	55 / 1.15	36 / 1.02	3.5 / 0.06	0.2 / 0.01	0.3	22	ABS 0.00	309	38	173	14	OSGS
		5-7-63		625									35 / 0.99										DWR
J. & M. Braga domestic and irrigation	4S/1W-28D4	9-62		1380	8.3	143 / 7.14	52 / 4.31	61 / 2.65	2.5 / 0.06	0 / 0.00	257 / 4.21	63 / 1.31	309 / 8.71	4.1 / 0.07	0.1 / 0.00	0.63	14	ABS 0.0	769	19	573	362	OWR
		5-9-63		1370									270 / 7.62										DWR
Wm. E. Edwards domestic	4S/1W-28D7	10-1-62		562	8.2	26 / 1.30	28 / 2.34	46 / 2.00	1.6 / 0.04	0 / 0.00	180 / 2.95	73 / 1.52	46 / 1.30	3.7 / 0.06	0.3 / 0.02	0.6	17		325	33	182	34	USGS

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Analyzed by c
	MDB&M					EAST BAY AREA OF SANTA CLARA VALLEY (2-9) (Cont.)																	
A.C.W.D. municipal	4S/1W-28D9	5-17-63		770									62 / 1.75	3.6 / 0.06									DWR
Washington Township Hospital domestic and hospital	4S/1W-28F5	9-62		436	8.3	28 / 1.40	14 / 1.16	44 / 1.91	1.8 / 0.05	4 / 0.13	182 / 2.98	38 / 0.79	26 / 0.73	2.4 / 0.04	0.3 / 0.02	0.4	22	ABS 0.0	260	42	128	0	USGS
		5-63		562									23 / 0.65										DGH
A.C.W.D. municipal	4S/1W-28H1	5-17-63		718									47 / 1.32	30 / 0.08									DWR
C. Caldeira domestic	4S/1W-29J8	9-62		2630	7.7	156 / 7.78	108 / 8.92	180 / 7.83	3.5 / 0.09	0 / 0.00	304 / 4.98	95 / 1.98	614 / 17.46	31 / 0.50	0.1 / 0.01	0.8	14	ABS 0.00	1580	32	835	586	USGS
		5-8-63		3250									738 / 20.81										DWR
A.C.W.D. municipal	4S/1W-29L12	9-62		835	8.1	63 / 3.14	31 / 2.54	45 / 1.96	2.0 / 0.05	0 / 0.00	149 / 2.44	50 / 1.04	155 / 4.37	5.7 / 0.09	0.0 / 0.00	0.4	23	ABS 0.00	537	23	284	162	USGS
		5-7-63		1160									218 / 6.15										DGH
A.C.W.D. municipal	4S/1W-30L3	9-62		735	8.4	19 / 0.95	7.7 / 0.63	131 / 5.70	1.8 / 0.05	8 / 0.27	208 / 3.41	54 / 1.12	90 / 2.54	1.2 / 0.02	0.3 / 0.02	0.4	21	ABS 0.0	425	78	59	0	USGS
		5-7-63		778									86 / 2.43										DWR
G. E. Hutchins domestic	4S/1W-31A2	5-8-63		1490									334 / 9.42										DGH
A.C.W.D. municipal	4S/1W-31B3	9-62		677	8.1	42 / 2.10	18 / 1.48	65 / 2.83	1.6 / 0.04	0 / 0.00	132 / 2.16	44 / 1.02	116 / 3.27	3.7 / 0.06	0.3 / 0.02	0.4	28	ABS 0.0	444	44	179	0	USGS
		5-7-63		811									102 / 2.88										DGH
L. Burchart domestic and irrigation	4S/1W-32A5	5-8-63		2220									426 / 12.00										DWR
A.C.W.D. municipal	4S/1W-32F1	5-17-63		1100									189 / 5.33	2.1 / 0.03									DGH

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MDB&M					EAST BAY AREA OF SANTA CLARA VALLEY (249) (Cont.)																	
J. Pianetta irrigation	4S/1W-33H1	9-62		4120	7.5	483 / 24.10	119 / 9.78	137 / 5.96	4.2 / 0.11	0 / 0.00	92 / 1.51	75 / 1.56	1250 / 35.26	29 / 0.47	0.1 / 0.01	0.6	26	ABS 0.00	2470	15	1690	1620	USGS
Enrico and Sodini irrigation	4S/1W-33G3	9-62		1170	8.1	24 / 1.20	54 / 4.40	139 / 6.05	3.4 / 0.09	0 / 0.00	286 / 4.69	83 / 1.73	173 / 4.88	27 / 0.44	0.2 / 0.01	0.8	25	ABS 0.0	660	52	280	45	USGS
		5-13-63		1450									140 / 3.95										DWR
R. Clarkes domestic and irrigation	4S/1W-33K1	9-62		1400	8.5	9.6 / 1.90	52 / 2.84	139 / 6.05	3.4 / 0.09	15 / 0.50	286 / 4.69	84 / 1.75	99 / 2.79	50 / 0.81	0.2 / 0.01	0.9	26	ABS 0.0	583	56	237	0	USGS
		5-6-63		1430									103 / 2.90										DWR
B. Rose domestic and irrigation	4S/1W-34Q4	9-62		1070	8.5	71 / 3.54	43 / 3.51	86 / 3.74	1.8 / 0.05	14 / 0.47	294 / 4.82	29 / 0.60	140 / 3.95	52 / 0.84	0.3 / 0.02	0.2	27		612	35	352	88	USGS
		5-8-63		1250									143 / 4.03	43 / 0.69									DWR
N.C.S.D. municipal	4S/1W-34R2	9-62		521	8.3	16 / 0.80	17 / 1.40	79 / 3.44	1.7 / 0.04	5 / 0.17	244 / 4.00	19 / 0.40	37 / 1.04	12 / 0.19	0.3 / 0.02	0.2	33	ABS 0.0	310	60	110	0	USGS
		5-7-63		680									37 / 1.04	0.0 / 0.00									DWR
A.C.I.D. municipal	4S/1W-35P3	9-62		640	8.3	22 / 1.10	18 / 1.49	99 / 4.31	1.7 / 0.04	5 / 0.17	326 / 5.34	21 / 0.44	40 / 1.13	8.1 / 0.13	0.2 / 0.01	0.3	24	ABS 0.0	370	62	129	0	USGS
		5-7-63		709									42 / 1.18										DWR
Andrada domestic and irrigation	4S/2W-3R1	9-62		579	8.5	44 / 1.80	8 / 1.08	81 / 3.52	1.5 / 0.04	10 / 0.33	289 / 4.74	41 / 0.85	18 / 0.51	2.0 / 0.03	0.0 / 0.00	0.2	25	ABS 0.0	359	55	144	0	USGS
		5-7-63		575									20 / 0.56										DWR
Holly Sugar Refinery industrial	4S/2W-10C1	9-62		565	8.2	30 / 1.50	13 / 1.10	68 / 2.96	2.3 / 0.06	0 / 0.00	172 / 2.82	33 / 0.73	66 / 1.86	4.1 / 0.07	0.2 / 0.01	0.2	23	ABS 0.0	333	53	130	0	USGS
		5-9-63		661									54 / 1.52										DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million							Mineral constituents in equivalents per million						Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$		Analyzed by c
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)					Total ppm	NC ppm	
	SUBBASIN					EAST BAY AREA OF SANTA CLARA VALLEY (2-9) (Cont.)																		
A.C.W.D. municipal	4S/2W-10M6	9-62		1810	7.8	97 / 4.84	34 / 2.80	204 / 8.87	3.6 / 0.09	0 / 0.00	108 / 1.77	53 / 1.10	445 / 13.96	2.4 / 0.04	0.2 / 0.01	0.2	22	ABS 0.0		1170	53	382	293	USG
		5-7-63		1820									451 / 12.72											DWR
Peccetto Bros. irrigation and domestic	4S/2W-10Q2	9-62		2480	7.9	175 / 8.73	138 / 11.37	137 / 5.96	3.3 / 0.08	0 / 0.00	145 / 2.38	364 / 7.58	562 / 15.85	15 / 0.24	0.2 / 0.01	0.6	21	ABS 0.0		1870	23	1000	881	USGS
		5-7-63		2680									501 / 14.13											DWR
H. Andrade domestic and irrigation	4S/2W-10R3	5-7-63		2280									308 / 8.69											DWR
J. C. Whipple abandoned	4S/2W-11A2	5-7-63		755									39 / 1.10	11 / 0.18										DWR
Kitayama	4S/2W-11G1	5-7-63		823									45 / 1.27	16 / 0.26										DWR
M. Faria domestic	4S/2W-11J1	5-10-63		775									45 / 1.27	5.0 / 0.08										DWR
H. Ibtra domestic and irrigation	4S/2W-11Q5	9-62		1290	7.9	99 / 4.94	54 / 4.46	94 / 4.09	1.7 / 0.04	0 / 0.00	314 / 5.15	102 / 2.12	112 / 3.16	184 / 2.97	0.4 / 0.02	0.4	22	ABS 0.0		884	30	470	213	USGS
		5-7-63		1430									113 / 3.14	97 / 1.56										DWR
L. Goularte domestic	4S/2W-11R12	5-7-63		1450									184 / 5.19	44 / 0.71										DWR
A.C.W.D. municipal	4S/2W-12C1	5-17-63		617									45 / 1.27	2.0 / 0.03										DWR
H. Faria domestic and irrigation	4S/2W-12N4	5-10-63		1130									98 / 2.76	53 / 0.85										DWR
M. S. Santos irrigation	4S/2W-12P2	5-14-63		893									68 / 1.92	39 / 0.63										DWR
T. L. Harvey irrigation	4S/2W-14E1	10-2-62		4550	7.7	380 / 18.96	211 / 17.34	268 / 11.66	4.4 / 0.11	0 / 0.00	88 / 1.44	444 / 9.24	1290 / 36.39	8.8 / 0.14	0.2 / 0.01	0.4	23			3170	24	1820	1750	USGS

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N C ppm	Analyzed by c
	SHB-3					EAST BAY AREA OF SANTA CLARA VALLEY (2-9) (Cont.)																	
T. T. Harvey irrigation	4S/2W-14F1	5-13-63		4100									967 / 27.27										DWR
A. Caeton irrigation and domestic	4S/2W-14J1	9-62		544	8.3	34 / 1.70	25 / 2.08	34 / 1.70	2.1 / 0.05	7 / 0.23	145 / 2.38	57 / 1.19	50 / 1.41	10 / 0.16	0.3 / 0.02	0.3	25		326	31	189	59	USGS
		5-7-63		772									52 / 1.47										DWR
T. T. Harvey domestic and irrigation	4S/2W-15C1	9-62		458	8.1	31 / 1.55	17 / 1.41	41 / 1.78	2.1 / 0.05	0 / 0.00	178 / 2.92	44 / 0.92	28 / 0.79	11 / 0.18	0.2 / 0.01	0.2	24	ABS 0.0	276	37	148	2	USGS
		5-7-63		580									28 / 0.79										DWR
Fink irrigation	4S/2W-15L4	9-62		493	8.1	35 / 1.75	18 / 1.49	35 / 1.52	2.8 / 0.07	0 / 0.00	147 / 2.41	52 / 1.08	40 / 1.13	9.2 / 0.15	0.1 / 0.00	0.34	29	ABS 0.0	297	31	162	42	DWR
		5-10-63		680									40 / 1.13										DWR
A. D. Patterson irrigation	4S/2W-22F2	9-62		568	8.5	28 / 1.40	5.8 / 0.48	91 / 3.96	1.6 / 0.04	5 / 0.17	251 / 4.11	40 / 0.83	26 / 0.73	1.0 / 0.02	0.3 / 0.02	0.37	35		366	67	94	0	DWR
		5-13-63		544									23 / 0.65										DWR
Patterson Ranch irrigation	4S/2W-23F2	9-62		595	8.1	68 / 3.39	13 / 1.09	34 / 1.48	2.0 / 0.05	0 / 0.00	211 / 3.46	55 / 1.14	48 / 1.35	5.8 / 0.09	0.2 / 0.01	0.37	23	ABS 0.0	356	25	224	51	DWR
		5-13-63		704									55 / 1.55										DWR
I. Croce irrigation	4S/2W-24D4	9-62		456	8.1	30 / 1.50	21 / 1.72	34 / 1.48	1.7 / 0.04	0 / 0.00	159 / 2.61	47 / 0.98	32 / 0.90	10 / 0.16	0.2 / 0.01	0.2	23		272	31	161	31	USGS
		5-7-63		621									31 / 0.87										DWR
J. A., Jr. and L. A. Macado irrigation	4S/2W-24J1	9-62		551	8.3	32 / 1.60	27 / 2.22	36 / 1.57	2.2 / 0.06	3 / 0.10	118 / 1.93	53 / 1.10	74 / 2.09	6.0 / 0.10	0.4 / 0.02	0.3	20		344	29	191	89	USGS
M. Kitani domestic and irrigation	4S/2W-24L6	9-62		580	8.6	67 / 3.34	20 / 1.66	32 / 1.39	1.7 / 0.04	17 / 0.57	227 / 3.72	50 / 1.04	32 / 0.90	6.3 / 0.10	0.4 / 0.02	0.2	22		361	22	250	36	USGS
		5-8-63		626									35 / 0.99										DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Analyzed by c
	MDB&M					EAST BAY AREA OF SANTA CLARA VALLEY (2-9) (Cont.)																	
H. H. and W. D. Patterson irrigation	4S/2W-26A1	9-62		1020	8.0	104 / 5.19	27 / 2.22	64 / 2.78	2.4 / 0.06	0 / 0.00	217 / 3.56	54 / 1.12	193 / 5.44	5.8 / 0.09	0.2 / 0.01	0.40	22	ABS 0.0	592	27	371	193	DWR
		5-13-63		1120									201 / 5.67										DWR
H. H. and W. D. Patterson domestic and irrigation	4S/2W-27L1	5-8-63		586									30 / 0.85										DWR
E. Milani industrial	4S/2W-35L2	5-9-63		916									132 / 3.72										DWR
A.C.W.D. municipal	5S/1W-4D1	9-62		571	8.4	15 / 0.75	4.6 / 0.38	114 / 4.96	1.8 / 0.05	10 / 0.33	269 / 4.41	39 / 0.81	20 / 0.56	20 / 0.32	0.2 / 0.01	0.3	27	ABS 0.0	364	81	59	0	USGS
		5-7-63		589									20 / 0.56										DWR
J. F. Trindade irrigation and domestic	5S/1W-6D1	9-62		1850	8.0	156 / 7.78	60 / 4.95	139 / 6.05	3.0 / 0.08	0 / 0.00	269 / 4.41	116 / 2.42	422 / 11.91	1.3 / 0.02	0.2 / 0.01	2.1	20		1030	32	637	417	DWR
		5-9-63		1930									451 / 12.72										DWR
L. Milani irrigation and domestic	5S/1W-6G1	9-62		557	8.8	32 / 1.60	9.4 / 0.77	90 / 3.92	1.8 / 0.05	19 / 0.63	253 / 4.15	29 / 0.60	28 / 0.79	11 / 0.18	0.3 / 0.02	0.2	22	ABS 0.0	360	61	119	0	USGS
		5-8-63		3400									980 / 27.60										DWR
Alameda County East Bay Title Insurance Co.	5S/1W-9J1	5-9-63		1410	7.9	112 / 5.59	48 / 3.94	108 / 4.70	2.4 / 0.06	0 / 0.00	453 / 7.42	37 / 0.77	226 / 6.37	0.2 / 0.00	0.3 / 0.02	0.46	23		792	33	477	106	DWR
A. F. Brosius irrigation and domestic	5S/1W-9K1	9-62		840	8.5	57 / 2.84	33 / 2.71	76 / 3.31	3.2 / 0.08	9 / 0.30	312 / 5.11	49 / 1.02	79 / 2.23	23 / 0.37	0.2 / 0.01	0.3	26		482	37	278	7	USGS
		5-8-63		910									78 / 2.20										DWR
W. B. Brinker irrigation	5S/1W-9P1	9-62		1260	8.2	86 / 4.29	40 / 3.31	106 / 4.61	4.9 / 0.13	0 / 0.00	242 / 3.97	28 / 0.58	265 / 7.48	5.3 / 0.09	0.2 / 0.01	0.2	25	ABS 0.0	794	37	380	182	USGS
		5-8-63		1360									295 / 8.32										DWR

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ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Analyzed by c
	MDB&M					EAST BAY AREA OF SANTA CLARA VALLEY (2-9) (Cont.)																	
L. Roland, Jr.	5S/1W-15C1	5-9-63		946									72 / 2.03										OWR
P. G. & E.	5S/1W-17A1	5-9-63		668									27 / 0.76										OWR
F. Encisco domestic and livestock	5S/2W-1B1	5-13-63		570									18 / 0.51										OWR
West Vaco Chemical Co. industrial	5S/2W-1N1	9-62		433	8.5	8.0 / 0.40	0.0 / 0.00	92 / 4.00	0.9 / 0.02	4 / 0.13	208 / 3.41	24 / 0.50	15 / 0.42	0.2 / 0.00	0.2 / 0.01	0.24	28	ABS 0.0	276	90	20	0	DWR
		5-8-63		738									77 / 2.17										DWR
	5S/2W-21L1	11-30-62		909	8.1	7.3 / 0.36	12 / 1.02	172 / 7.48	6.3 / 0.16	0 / 0.00	276 / 4.52	24 / 0.50	137 / 3.86	0.2 / 0.00	0.1 / 0.00	0.38	18		510	83	69	0	DWR
						SOUTH BAY AREA OF SANTA CLARA VALLEY (2-9)																	
Minsor Bros. domestic	6S/1E-7C1	8-20-62	64	560	8.4	32 / 1.60	15 / 1.23	78 / 3.40	0.7 / 0.02	9.0 / 0.30	253 / 4.15	51 / 1.07	21 / 0.57	0.0 / 0.00	0.1 / 0.01	0.2	16		355	54	142	0	DWR
Wrigley irrigation	6S/1E-21G1	8-30-62	66	660	8.6	18 / 0.91	24 / 2.04	95 / 4.13	1.0 / 0.03	12 / 0.40	222 / 3.63	65 / 1.37	48 / 1.35	26 / 0.42	0.1 / 0.01	0.4	25		460	58	146	0	DWR
M. Muchado irrigation and domestic	6S/1E-30M1	8-22-62	71	500	8.5	37 / 1.85	19 / 1.55	50 / 2.17	1.1 / 0.03	9.0 / 0.30	232 / 3.80	35 / 0.72	23 / 0.65	0.0 / 0.00	0.1 / 0.01	0.2	22		336	39	170	0	DWR
J. S. Garcia irrigation and domestic	6S/1W-11B1	8-20-62	67	600	8.3	42 / 2.11	28 / 2.30	51 / 2.20	1.1 / 0.03	4.2 / 0.14	266 / 4.36	34 / 0.70	49 / 1.37	0.0 / 0.00	0.1 / 0.01	0.2	22		380	33	221	0	DWR
A. French irrigation and domestic	6S/1W-14E1	8-20-62	67	640	8.6	48 / 2.42	30 / 2.49	55 / 2.40	1.3 / 0.03	18 / 0.60	238 / 3.90	63 / 1.33	52 / 1.45	0.0 / 0.00	0.1 / 0.01	0.2	22		442	33	245	20	DWR
R. T. Collier Corp. industrial	6S/1W-16A1	7-26-62	59	2100	7.9	126 / 6.31	85 / 6.99	210 / 9.13	2.5 / 0.06	0 / 0.00	101 / 1.65	134 / 2.81	631 / 17.80	0.0 / 0.00	0.1 / 0.01	0.4	17		1375	44	665	58	OWR
C. W. Dunton irrigation	6S/1W-17M1	8-62		440	8.6	19 / 0.94	5.7 / 0.47	75 / 3.25	0.7 / 0.02	9.0 / 0.30	216 / 3.54	16 / 0.35	16 / 0.45	0.0 / 0.00	0.1 / 0.01	0.2	14		278	70	70	0	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MDB&M					SOUTH BAY AREA OF SANTA CLARA VALLEY (2-9) (Cont.)																	
T. A. Wilcox irrigation	6S/1W-26D1	8-62		400	8.5	35 / 1.74	7.7 / 0.64	49 / 2.13	0.7 / 0.02	6.0 / 0.20	204 / 3.35	21 / 0.45	11 / 0.30	2.9 / 0.05	0.1 / 0.01	0.2	21		274	47	119	0	DWR
Sam Weston	6S/1W-28R1	7-25-62	67	430	8.2	46 / 2.29	13 / 1.11	28 / 1.20	1.3 / 0.03	0 / 0.00	187 / 3.06	45 / 0.94	16 / 0.45	5.0 / 0.08	0.2 / 0.01	0.2	31		290	26	170	17	DWR
G. H. Fukumoto domestic and irrigation	6S/1W-29C1	7-26-62	66	550	8.6	51 / 2.53	21 / 1.69	40 / 1.75	0.9 / 0.03	12 / 0.40	262 / 4.30	22 / 0.46	22 / 0.63	3.9 / 0.06	0.1 / 0.01	0.2	20		316	29	211	0	DWR
Rezentes domestic	6S/2W-9H1	8-27-62	70	530	8.6	34 / 1.71	12 / 1.00	64 / 2.80	12 / 0.31	16 / 0.54	255 / 4.19	19 / 0.39	21 / 0.60	0.0 / 0.00	0.1 / 0.01	0.3	22		342	48	135	0	DWR
J. Joaquin	6S/2W-9K2	7-27-62	72	520	8.2	47 / 2.34	17 / 1.35	52 / 2.25	1.1 / 0.03	0 / 0.00	281 / 4.60	31 / 0.65	23 / 0.65	0.0 / 0.00	0.1 / 0.01	0.2	22		340	38	185	0	DWR
F. Ormonde	6S/2W-16R1	7-27-62	69	600	8.2	37 / 2.84	30 / 2.46	33 / 1.43	1.2 / 0.03	0 / 0.00	201 / 3.30	90 / 1.89	43 / 1.20	14 / 0.23	0.1 / 0.01	0.1	28		398	21	265	100	DWR
California Water Service Company municipal	6S/2W-20N1	8-27-62	70	630	8.1	46 / 2.30	27 / 2.22	58 / 2.52	1.1 / 0.03	0 / 0.00	296 / 4.85	14 / 0.31	43 / 1.20	37 / 0.60	0.1 / 0.01	24	24		400	36	226	0	DWR
Homm Bros.	6S/2W-24M3	8-24-62	71	460	8.4	30 / 1.52	17 / 1.40	47 / 2.05	0.8 / 0.02	3.6 / 0.12	218 / 3.57	28 / 0.59	21 / 0.57	0.0 / 0.00	0.1 / 0.01	0.2	25		310	41	146	0	DWR
Slonaker irrigation and domestic	6S/2W-29D2	8-27-62	66	720	8.2	68 / 3.42	29 / 2.36	49 / 2.13	1.2 / 0.03	0 / 0.00	324 / 5.30	23 / 0.49	45 / 1.25	45 / 0.73	0.1 / 0.01	0.1	28		446	27	289	24	DWR
H. Mantelli irrigation and domestic	6S/2W-34M1	8-28-62	70	500	8.6	32 / 2.61	26 / 2.10	24 / 1.05	0.7 / 0.02	12 / 0.40	253 / 4.15	14 / 0.28	23 / 0.65	15 / 0.24	0.1 / 0.01	0.1	24		314	18	235	8	DWR
O. P. Gluhaich irrigation	6S/2W-36H2	7-26-62	68	580	8.0	61 / 3.03	24 / 1.96	35 / 1.50	1.5 / 0.04	0 / 0.00	217 / 3.55	52 / 1.09	52 / 1.45	19 / 0.30	0.2 / 0.01	0.2	24		404	23	250	73	DWR
W. S. Bennet domestic and irrigation	7S/1W-5P1	7-26-62	71	440	8.2	38 / 1.90	17 / 1.42	30 / 1.30	1.1 / 0.03	0 / 0.00	189 / 3.10	33 / 0.68	21 / 0.57	12 / 0.19	0.1 / 0.01	0.2	22		290	28	166	11	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MDB&M					LIVERMORE VALLEY (2-10)																	
T. P. Bishop Co. irrigation	2S/1W-22A1	6-21-63	66	856	8.1	30 / 1.50	17 / 1.40	118 / 5.13	2.3 / 0.06	0 / 0.00	173 / 2.84	12 / 0.25	168 / 4.74	1.5 / 0.02	0.2 / 0.01	0.3	29	ABS 0.0	458	63	145	3	AWR
City of Livermore industrial and stock	2S/2E-27K1	6-24-63		6700	8.1	346 / 17.26	38 / 3.12	1100 / 47.85	2.8 / 0.07	0 / 0.00	220 / 3.60	34 / 0.71	2250 / 63.47	3.5 / 0.06	1.0 / 0.05	36	27	ABS 0.4	4070	70	1020	840	DWR
Henry Garaventa stock	2S/2E-35C1	6-24-63		4500	8.9	24 / 1.20	42 / 3.44	920 / 40.02	2.9 / 0.07	96 / 3.20	494 / 8.10	105 / 2.19	1140 / 32.16	11 / 0.18	1.5 / 0.08	36	8.7		2680	89	232	0	USGS
F. Gustanich domestic	2S/2E-35G2	6-24-63		2640	8.4	29 / 1.45	48 / 3.94	480 / 20.88	1.6 / 0.04	1 / 0.03	289 / 4.74	78 / 1.62	640 / 18.05	22 / 0.35	1.2 / 0.06	6.5	22	ABS 0.0	1450	79	270	31	DWR
E. B. and J. Nevin domestic	3S/1W-1G1	6-21-63	62	920	8.3	56 / 2.79	40 / 3.29	79 / 3.44	1.4 / 0.04	3 / 0.10	286 / 4.69	111 / 2.31	92 / 2.60	3.1 / 0.05	0.6 / 0.03	0.2	14	ABS 0.0	549	36	304	65	USGS
R. M. Wing abandoned	3S/1W-12G2	3-6-63	59	1040	8.3	107 / 5.34	49 / 4.07	54 / 2.35	0.5 / 0.01	0 / 0.00	375 / 6.15	149 / 3.10	93 / 2.62	8.1 / 0.13	0.3 / 0.02	0.20	27	ABS 0.0; PO_4 0.20 (Total)	679	20	471	163	DWR
Mrs. Berwick	3S/1E-1F1	2-28-63		674	8.3	11 / 0.55	2.8 / 0.23	137 / 5.96	1.0 / 0.02	0 / 0.00	277 / 4.54	29 / 0.60	55 / 1.55	4.8 / 0.08	0.3 / 0.02	0.47	28	ABS 0.0; PO_4 0.08 (Total)	429	88	39	0	DWR
L. Lupton	3S/1E-1K1	2-28-63	68	561	7.9	41 / 2.04	19 / 1.56	51 / 2.22	2.3 / 0.06	0 / 0.00	280 / 4.59	39 / 0.81	20 / 0.56	0.4 / 0.01	0.0 / 0.00	0.34	15		337	38	180	0	DWR
Inman School	3S/1E-1M1	2-28-63	68	1440	8.3	35 / 1.75	26 / 2.17	258 / 11.22	1.7 / 0.04	0 / 0.00	524 / 8.59	68 / 1.42	181 / 5.10	12 / 0.19	0.5 / 0.03	1.6	27	ABS 0.0; PO_4 0.08 (Total)	849	74	196	0	DWR
Alameda County domestic	3S/1E-3Q1	6-21-63		1270	8.4	62 / 3.09	42 / 3.44	163 / 7.09	1.4 / 0.04	5 / 0.17	442 / 7.24	72 / 1.50	160 / 4.51	28 / 0.45	0.5 / 0.03	1.6	26	ABS 0.0	767	52	327	0	DWR
Volk-McLain	3S/1E-7E2	2-26-63		1070	8.1	84 / 4.19	26 / 2.18	114 / 4.96	1.9 / 0.05	0 / 0.00	454 / 7.44	50 / 1.04	102 / 2.88	1.5 / 0.02	0.2 / 0.01	0.39	27	ABS 0.0; PO_4 0.39 (Total)	650	44	319	0	DWR
U. S. Air Force domestic and irrigation	3S/1E-8H3	6-21-63	63	664	8.7	18 / 0.90	54 / 4.48	36 / 1.57	1.8 / 0.05	14 / 0.47	204 / 3.34	56 / 1.17	68 / 1.92	11 / 0.18	0.6 / 0.03	0.3	21	ABS 0.0	376	22	269	79	USGS
Silva Bros.	3S/1E-9A1	7-3-62		1550	8.3	50 / 2.50	63 / 5.15	202 / 8.79	1.9 / 0.05	0 / 0.00	560 / 9.18	85 / 1.77	178 / 5.02	30 / 0.48	0.3 / 0.02	2.7	29		943	53	383	0	DWR
		6-24-63		1440	8.5	55 / 2.74	61 / 5.03	186 / 8.09	2.1 / 0.05	17 / 0.57	473 / 7.75	88 / 1.83	172 / 4.85	31 / 0.50	0.4 / 0.02	2.8	25		861	51	389	0	DWR
Rose Brothers	3S/1E-9D1	6-24-63		4570	8.0	195 / 9.73	248 / 20.44	412 / 17.92	3.3 / 0.08	0 / 0.00	318 / 5.21	503 / 10.47	1100 / 31.03	26 / 0.42	0.1 / 0.00	3.4	30	ABS 0.0	2830	37	1510	1249	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Analyzed by c
	M086M					LIVERMORE VALLEY (2-10) (Cont.)																	
Neilson	3S/1E-9L1	6-24-63		1410	8.1	81 / 4.04	87 / 7.19	89 / 3.87	2.5 / 0.06	0 / 0.00	427 / 7.00	91 / 1.89	197 / 5.56	21 / 0.34	0.2 / 0.01	1.6	23		831	26	562	212	DWR
R. Kause domestic	3S/1E-10E2	2-27-63		1160	8.0	99 / 4.94	65 / 5.37	55 / 2.39	3.1 / 0.08	0 / 0.00	496 / 8.13	66 / 1.37	100 / 2.82	27 / 0.44	0.2 / 0.01	1.1	20	ABS 0.0 PO_4 0.03 (Total)	800	19	516	109	DWR
Jamieson irrigation	3S/1E-11E1	6-24-63		996	8.3	20 / 1.00	85 / 6.99	50 / 2.18	2.2 / 0.06	0 / 0.00	279 / 4.57	51 / 1.06	148 / 4.18	19 / 0.31	0.2 / 0.01	0.7	26	ABS 0.0	551	21	400	171	DWR
Ed Hageman domestic and irrigation	3S/1E-11H1	2-27-63	62	687	8.3	42 / 2.10	46 / 3.83	29 / 1.26	1.6 / 0.04	0 / 0.00	297 / 4.87	39 / 0.81	47 / 1.32	19 / 0.31	0.1 / 0.00	0.42	24	ABS 0.0 PO_4 0.07 (Total)	461	17	297	53	DWR
		6-21-63		777	8.2	50 / 2.50	54 / 4.45	30 / 1.30	1.7 / 0.04	0 / 0.00	305 / 5.00	42 / 0.87	74 / 2.09	19 / 0.31	0.3 / 0.02	0.29	24	ABS 0.0	464	16	348	98	DWR
Ed Hageman abandoned	3S/1E-11H3	3-6-63	65	1680	8.0	81 / 4.04	93 / 7.67	139 / 6.05	2.7 / 0.07	0 / 0.00	527 / 8.64	20 / 0.42	312 / 8.80	0.3 / 0.00	0.2 / 0.01	1.0	28	ABS 1.0 PO_4 0.10 (Total)	985	34	586	154	DWR
A. H. Hageman drainage	3S/1E-12B1	3-7-63	67	1610	8.3	60 / 2.99	84 / 6.88	166 / 7.22	2.6 / 0.07	0 / 0.00	477 / 7.82	25 / 0.52	319 / 9.00	0.4 / 0.01	0.2 / 0.01	1.0	30	ABS 1.3 PO_4 0.09 (Total)	908	42	494	103	DWR
A. H. Hageman	3S/1E-12C2	2-27-63	52	1440	8.2	24 / 1.20	56 / 4.57	220 / 9.57	2.3 / 0.06	0 / 0.00	544 / 8.92	31 / 0.64	204 / 5.75	1.3 / 0.02	0.0 / 0.00	3.0	3.4	ABS 0.0 PO_4 0.01 (Total)	846	62	289	0	DWR
City of Livermore domestic	3S/1E-12H1	2-28-63		751	8.3	47 / 2.34	53 / 4.39	30 / 1.30	1.6 / 0.04	0 / 0.00	334 / 5.47	38 / 0.79	55 / 1.55	15 / 0.24	0.1 / 0.00	0.43	26	ABS 0.0 PO_4 0.11 (Total)	534	16	337	63	DWR
H. Johnson	3S/1E-12M1	3-7-63	66	1550	8.3	89 / 4.44	113 / 9.29	60 / 2.61	21 / 0.54	0 / 0.00	498 / 8.16	56 / 1.16	262 / 7.39	12 / 0.19	0.2 / 0.01	0.70	25	ABS 0.1	921	15	687	279	DWR
H. Johnson	3S/1E-12P1	2-28-63	65	580	8.2	35 / 1.75	42 / 3.48	22 / 0.96	1.5 / 0.04	0 / 0.00	282 / 4.62	31 / 0.64	23 / 0.65	17 / 0.27	0.1 / 0.00	0.32	24		373	15	262	31	DWR
California Rock & Gravel Co. domestic	3S/1E-13P2	6-21-63		567	8.1	62 / 3.09	9.4 / 0.77	52 / 2.26	1.6 / 0.04	0 / 0.00	211 / 3.46	51 / 1.06	47 / 1.32	2.1 / 0.03	5.8 / 0.30	0.32	26	ABS 0.0	358	37	193	20	DWR
H. J. Kaiser Ind. domestic	3S/1E-15L1	6-21-63	64	516	7.8	72 / 3.59	11 / 0.89	24 / 1.04	1.3 / 0.03	0 / 0.00	220 / 3.60	39 / 0.81	34 / 0.96	8.4 / 0.14	0.2 / 0.01	0.26	21	ABS 0.0	284	19	224	44	DWR
H. C. Bush	3S/1E-16A1	3-6-63	61	683	8.0	62 / 3.09	37 / 3.06	29 / 1.26	2.2 / 0.06	0 / 0.00	316 / 5.18	50 / 1.04	36 / 1.02	7.2 / 0.12	0.2 / 0.01	0.31	18	ABS 0.0 PO_4 0.0 (Total)	400	17	308	49	DWR
M. Kruse irrigation	3S/1E-17H2	6-21-63		860	7.9	117 / 5.84	17 / 1.41	39 / 1.70	2.0 / 0.05	0 / 0.00	282 / 4.62	67 / 1.39	103 / 2.90	12 / 0.19	0.1 / 0.00	0.46	22	ABS 0.0	424	19	363	132	DWR
Pleasanton Twp. W. D. irrigation	3S/1E-17R1	6-25-63		426	8.5	23 / 1.15	24 / 2.01	28 / 1.22	1.6 / 0.04	6 / 0.20	150 / 2.46	43 / 0.90	26 / 0.73	6.7 / 0.11	0.9 / 0.05	0.1	15	ABS 0.0	247	28	158	25	USGS

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MDB&M							LIVERMORE VALLEY (2-30) (Cont.)															
R. H. Dana	3S/1E-18M3	2-26-63	55	750	7.4	71 / 3.54	31 / 2.55	40 / 1.74	0.6 / 0.02	0 / 0.00	285 / 4.67	76 / 1.58	34 / 0.96	41 / 0.66	0.2 / 0.01	0.19	23	ABS 0.0 PO_4 0.04 (Total)	509	22	305	71	DWR
City of Pleasanton	3S/1E-20J1	3-5-63	61	1400	7.9	89 / 4.44	73 / 5.99	116 / 5.05	2.2 / 0.06	0 / 0.00	532 / 8.72	70 / 1.46	151 / 4.26	76 / 1.22	0.2 / 0.01	0.64	25	ABS 0.0 PO_4 0.15 (Total)	813	32	522	86	DWR
City of Pleasanton	3S/1E-20Q1	3-5-63	59	1610	7.8	88 / 4.39	86 / 7.04	137 / 5.96	1.8 / 0.05	0 / 0.00	603 / 9.88	75 / 1.56	179 / 5.05	88 / 1.42	0.2 / 0.01	0.84	22	ABS 0.0	940	34	572	78	DWR
City of Pleasanton abandoned	3S/1E-20Q2	9-5-62		1530	7.6	87 / 4.34	85 / 6.97	139 / 6.05	0.6 / 0.02	0 / 0.00	760 / 12.46	55 / 1.14	137 / 3.86	0.4 / 0.01	0.3 / 0.02	0.9	18	ABS 0.00 PO_4 0.00 (Total)	897[a]	35	566	0	DWR
		3-4-63		1480	7.7	91 / 4.54	82 / 6.71	133 / 5.78	0.6 / 0.02	0 / 0.00	724 / 11.87	59 / 1.23	123 / 3.47	10 / 0.16	0.6 / 0.03	0.89	16	ABS 0.4 PO_4 0.02 (Total)	856	34	563	0	DWR
Albert Vomini domestic	3S/1E-29A2	2-26-63	62	1490	7.6	76 / 3.79	51 / 4.22	166 / 7.22	1.3 / 0.03	0 / 0.00	381 / 6.24	71 / 1.48	203 / 5.72	102 / 1.64	0.4 / 0.02	0.64	21	ABS 0.0 PO_4 0.26 (Total)	1010	47	401	89	DWR
City of Pleasanton abandoned	3S/1E-29B1	9-5-62		1360	8.2	28 / 1.40	79 / 6.47	158 / 6.87	7.5 / 0.19	0 / 0.00	605 / 9.92	14 / 0.29	158 / 4.46	17 / 0.27	0.2 / 0.01	0.8	8.9	ABS 0.00 PO_4 0.01 (Total)	768[a]	46	394	0	DWR
		3-5-63	61	1650	7.9	86 / 4.29	87 / 7.14	158 / 6.87	1.5 / 0.04	0 / 0.00	655 / 10.74	70 / 1.46	188 / 5.30	64 / 1.03	0.3 / 0.02	0.72	27	ABS 0.1 PO_4 0.01 (Total)	958	37	572	35	DWR
Mrs. Cohen	3S/1E-32K2	2-26-63	62	1500	8.0	114 / 5.69	65 / 5.36	114 / 4.96	3.4 / 0.09	0 / 0.00	511 / 8.38	108 / 2.25	193 / 5.44	1.7 / 0.03	0.2 / 0.01	3.8	26	ABS 0.0 PO_4 0.03 (Total)	1030	31	553	134	DWR
California Water Service municipal	3S/2E-4H1	6-24-63		671	8.8	34 / 1.70	43 / 3.50	46 / 2.00	1.5 / 0.04	18 / 0.60	247 / 4.05	34 / 0.71	52 / 1.47	28 / 0.45	0.2 / 0.01	0.4	21	ABS 0.0	392	28	260	28	USGS
J. Schenone domestic and irrigation	3S/2E-4M1	6-24-63		2000	8.5	37 / 0.90	104 / 9.54	250 / 10.88	1.8 / 0.05	6 / 0.20	356 / 5.83	406 / 8.45	250 / 7.05	1.9 / 0.03	0.5 / 0.03	5.0	32	ABS 0.0	1300	51	522	210	USGS
Gandolfo domestic	3S/2E-6P1	3-7-63	67	951	7.9	64 / 3.19	64 / 5.28	43 / 1.87	2.3 / 0.06	0 / 0.00	354 / 5.80	56 / 1.16	105 / 2.96	28 / 0.45	0.1 / 0.00	0.60	26	ABS 0.00	557	18	424	134	DWR
H. R. Johnson	3S/2E-7C1	3-15-63		1520	7.7	43 / 2.14	95 / 7.81	114 / 4.96	2.9 / 0.07	0 / 0.00	489 / 8.01	42 / 0.87	201 / 5.67	12 / 0.19	0.1 / 0.00	0.95	27		896	30	498	97	DWR
H. L. Hageman irrigation	3S/2E-7K1	6-24-63		702	8.8	45 / 2.25	56 / 4.63	26 / 1.13	1.9 / 0.05	20 / 0.67	300 / 4.92	41 / 0.85	40 / 1.13	27 / 0.44	0.2 / 0.01	0.2	22	ABS 0.0	416	14	344	65	USGS
California Water Service Co. municipal	3S/2E-8H1	6-24-63		681	8.8	34 / 1.70	44 / 3.60	45 / 1.96	1.6 / 0.04	20 / 0.67	247 / 4.05	33 / 0.69	52 / 1.47	28 / 0.45	0.2 / 0.01	0.5	18	ABS 0.0	406	27	265	30	USGS

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MDB&M					LIVERMORE VALLEY (2-10) (Cont.)																	
Amling-DeVore Nursery irrigation	3S/2E-10H1	6-25-63		773	8.3	79 / 3.94	12 / 1.02	62 / 2.70	1.9 / 0.05	0 / 0.00	260 / 4.26	46 / 0.96	74 / 2.09	29 / 0.47	0.4 / 0.02	1.1	30	ABS 0.0	431	35	248	35	DWR
B. G. Wood irrigation	3S/2E-29D1	6-24-63		784	8.3	60 / 2.99	36 / 2.96	49 / 2.13	1.8 / 0.05	0 / 0.00	279 / 4.57	63 / 1.31	66 / 1.86	22 / 0.35	0.2 / 0.01	0.4	22	ABS 0.0	469	26	298	69	DWR
I. Amaral irrigation	3S/3E-19C1	6-25-63		1610	8.5	30 / 1.50	46 / 3.81	258 / 11.22	2.4 / 0.06	13 / 0.43	502 / 8.23	99 / 2.06	219 / 6.18	1.5 / 0.02	0.6 / 0.03	6.5	25	ABS 0.0	959	68	266	0	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
								CENTRAL COASTAL REGION (No. 3)															
	MDB&M							PAJARO VALLEY (3-2)															
S. H. Gandrup domestic and irrigation	11S/2E-27A1	9-6-62		691				40 / 1.74					54 / 1.52										DWR
		5-21-63		680	8.3	74 / 3.68	24 / 1.97	40 / 1.75	1.5 / 0.04	4.2 / 0.14	275 / 4.51	49 / 1.03	55 / 1.55	0 / 0.00	0.4 / 0.02	0.1	21		434	24	282	49	LL
Frank T. Blake irrigation	12S/1E-11L1	9-5-62		420				22 / 0.96					20 / 0.56										DWR
		5-21-63		450	8.3	37 / 1.84	20 / 1.65	23 / 1.00	2.4 / 0.06	3.0 / 0.10	206 / 3.38	24 / 0.50	16 / 0.45	3.0 / 0.05	0.2 / 0.01	1.0	32		258	22	175	0	LL
Sunset Beach Park domestic	12S/1E-11N1	9-5-62		423				21 / 0.91					24 / 0.68										DWR
		5-21-63		410	7.6	34 / 1.70	19 / 1.61	22 / 0.95	1.7 / 0.04	0 / 0.00	188 / 3.08	19 / 0.40	20 / 0.57	5.0 / 0.08	0.2 / 0.01	0.1	33		282	22	165	11	LL
J. Roacha, Jr. irrigation	12S/1E-14J1	9-5-62		357				33 / 1.44					52 / 1.47										DWR
		5-22-63		380	7.9	21 / 1.06	19 / 1.57	27 / 1.17	0.5 / 0.02	0 / 0.00	60 / 0.98	26 / 0.57	39 / 1.10	67 / 1.08	0.1 / 0.01	0.1	29		250	32	131	82	LL
E. L. Padden domestic	12S/1E-23R1	9-5-62		582				44 / 1.91					25 / 0.70										DWR
		5-22-63		560	8.4	22 / 1.11	30 / 2.45	50 / 2.17	13 / 0.34	6.0 / 0.20	259 / 4.25	32 / 0.66	30 / 0.85	0 / 0.00	0.1 / 0.01	0.1	19		322	36	188	0	LL
H. Trafton irrigation	12S/1E-24G1	9-5-62		505				27 / 1.17					22 / 0.62										DWR
		5-21-63		511	8.4	36 / 1.78	30 / 2.50	28 / 1.20	3.6 / 0.09	6.0 / 0.20	238 / 3.90	24 / 0.50	21 / 0.60	31 / 0.50	0.2 / 0.01	0.1	29		314	21	216	11	LL
domestic	12S/1E-24Q	9-5-62		466				34 / 1.48					17 / 0.48										DWR
		5-22-63		490	8.2	33 / 1.63	21 / 1.70	37 / 1.60	5.5 / 0.14	0 / 0.00	224 / 3.67	42 / 0.88	14 / 0.40	0 / 0.00	0.1 / 0.01	0.1	22		286	32	167	0	LL
A. L. Waugaman irrigation	12S/2E-7K1	9-5-62	63	492				22 / 0.96					17 / 0.48										DWR

TABLE E-2

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Analyzed by c
	MDB&M					PAJARO VALLEY (3-2) (Cont.)																	
Sheehy irrigation	12S/2E-12E1	9-5-62	62	1260				66 / 2.87					72 / 2.03										DWR
City of Watsonville industrial and domestic	12S/2E-18K2	9-5-62		443				24 / 1.04					14 / 0.39										DWR
		5-22-63		430	8.4	49 / 2.46	15 / 1.20	26 / 1.13	1.9 / 0.05	4.5 / 0.15	209 / 3.43	38 / 0.80	12 / 0.32	0 / 0.00	0.2 / 0.01	0.1	27		290	23	183	4	LL
T. E. Trafton irrigation	12S/2E-19B1	9-5-62	67	530	8.2	42 / 2.10	30 / 2.45	35 / 1.50	2.3 / 0.06	0 / 0.00	275 / 4.51	38 / 0.79	25 / 0.70	0.0 / 0.00	0.1 / 0.01	0.2	36		374	25	227	2	DWR
M. Williamson domestic and irrigation	12S/2E-19M1	9-5-62	67	700	8.2	46 / 2.30	40 / 3.32	37 / 1.60	2.6 / 0.07	0 / 0.00	185 / 3.03	58 / 1.20	101 / 2.85	0.0 / 0.00	0.2 / 0.01	0.2	28		430	22	281	129	DWR
E. Yappert irrigation and domestic	12S/2E-30E1	7-23-62		13500	7.4	1212 / 60.50	1161 / 95.50	225 / 9.80	7.5 / 0.19	0 / 0.00	88 / 1.45	506 / 10.55	5452 / 153.75	0.0 / 0.00	0.1 / 0.01	0.1	16		10020	5.9	7800	7728	DWR
J. Fenaglio domestic and irrigation	12S/2E-30N1	7-23-62	61	650	8.3	37 / 1.84	33 / 2.68	47 / 2.05	2.1 / 0.05	3 / 0.10	156 / 2.57	67 / 1.39	60 / 1.70	55 / 0.88	0.1 / 0.01	0.1	27		404	31	226	93	DWR
Ranger domestic	12S/2E-31A1	9-5-62		692				41 / 1.78					44 / 1.24										DWR
Jensen irrigation	12S/2E-31C1	7-23-62	61	495	8.0	26 / 1.31	16 / 1.25	47 / 2.05	1.8 / 0.05	0 / 0.00	77 / 1.27	17 / 0.36	72 / 2.03	59 / 0.95	0.1 / 0.01	0.1	38		308	44	128	64	DWR
F. Tornavaca irrigation	12S/2E-31K1	7-24-62	68	1020	7.5	73 / 3.64	49 / 4.00	65 / 2.83	3.0 / 0.08	0 / 0.00	218 / 3.56	69 / 1.44	184 / 5.20	11 / 0.18	0.1 / 0.01	0.2	27		588	27	382	204	DWR
S. H. Cowell irrigation	12S/2E-32C1	7-24-62	60	610	8.4	40 / 1.99	31 / 2.55	35 / 1.50	2.3 / 0.06	10.8 / 0.36	181 / 2.97	54 / 1.13	55 / 1.55	3.2 / 0.05	0.1 / 0.01	0.1	33		384	25	227	60	DWR
Johnson irrigation	12S/2L-32K1	9-5-62		481				48 / 2.09					68 / 1.92										DWR
		5-22-63		450	7.5	17 / 0.84	11 / 0.91	56 / 2.43	1.2 / 0.03	0 / 0.00	69 / 1.14	3.8 / 0.08	74 / 2.08	46 / 0.74	0.1 / 0.01	0.1	23		286	58	88	31	LL
I. Banovac irrigation	12S/3E-7B1	9-6-62	60	1250				84 / 3.65					85 / 2.40										DWR
Tanimura Bros. irrigation	12S/3E-9Q1	5-22-63		1550	8.1	99 / 4.96	68 / 5.61	138 / 6.00	3.0 / 0.08	0 / 0.00	357 / 5.85	283 / 5.89	163 / 4.60	0 / 0.00	0.1 / 0.01	0.3	21		1150	36	523	231	LL

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Analyzed by c
	MDB&M					PAJARO VALLEY (3-2) (Cont.)																	
C. McGinnis domestic and irrigation	12S/3E-19H1	7-30-62	65	350	8.1	19 / 0.95	11 / 0.90	39 / 1.70	0.8 / 0.03	0 / 0.00	100 / 1.63	3.8 / 0.08	58 / 1.63	8.5 / 0.14	0.2 / 0.01	0.0	44		233	48	93	11	DWR
H. Fukuba irrigation	12S/3E-30A1	7-30-62	66	465	8.0	30 / 1.52	12 / 0.98	44 / 1.90	1.8 / 0.05	0 / 0.00	81 / 1.33	16 / 0.35	72 / 2.03	36 / 0.58	0.1 / 0.01	0.0	36		288	43	125	58	DWR
Hurley irrigation and domestic	13S/1E-1A1	7-23-62	63	1320	8.4	94 / 4.69	63 / 5.15	85 / 3.70	3.2 / 0.08	10.2 / 0.34	199 / 3.26	77 / 1.61	289 / 8.15	8.2 / 0.13	0.1 / 0.01	0.2	27		832	27	492	312	DWR
M. Vaughn domestic and irrigation	13S/2E-1K1	7-31-62	64	260	8.0	12 / 0.59	10 / 0.84	28 / 1.20	0.9 / 0.03	0 / 0.00	87 / 1.43	1.9 / 0.04	28 / 0.80	18 / 0.29	0.1 / 0.01	0.0	44		194	45	72	0	DWR
irrigation	13S/2E-5M1	8-15-62	63	1100	8.4	83 / 4.15	56 / 4.62	91 / 3.95	3.9 / 0.10	9.0 / 0.30	285 / 4.67	187 / 3.90	106 / 3.00	59 / 0.95	0.1 / 0.01	0.1	31		810	31	438	190	DWR
G. H. Hurley irrigation	13S/2F-6E2	7-24-62	64	1300	8.2	71 / 3.53	23 / 3.87	138 / 6.00	3.0 / 0.08	0 / 0.00	197 / 3.23	112 / 2.34	262 / 7.40	20 / 0.32	0.1 / 0.01	0.2	46		792	45	370	8	DWR
F. Capurro & Sons domestic and irrigation	13S/2E-6P1	9-5-62		997				192 / 8.35					148 / 4.17										DWR
		5-22-63		1150	8.5	16 / 0.80	5.2 / 0.43	225 / 9.80	4.5 / 0.12	7.2 / 0.24	196 / 3.22	88 / 1.85	202 / 5.70	0 / 0.00	0.2 / 0.01	0.1	24		666	88	62	0	LL
Giberson irrigation	13S/2E-6R1	8-15-62	67	740	8.5	51 / 2.53	36 / 3.03	51 / 2.20	3.9 / 0.10	9.0 / 0.30	235 / 3.85	54 / 1.13	86 / 2.43	0.0 / 0.00	0.1 / 0.01	0.3	35		465	28	278	71	DWR
						GILROY-HOLLISTER BASIN (3-3)																	
E. Andrade irrigation	9S/3E-25N3	6-27-63		445	8.2	28 / 1.40	23 / 1.90	27 / 1.17	1.8 / 0.05	0 / 0.00	182 / 2.98	23 / 0.48	23 / 0.65	20 / 0.32	0.2 / 0.01	0.21	24		265	26	165	16	DWR
P. L. Hudson irrigation	10S/3E-1E2	6-27-63		429	7.9	34 / 1.70	26 / 2.10	14 / 0.61	0.7 / 0.02	0 / 0.00	198 / 3.24	24 / 0.50	14 / 0.39	13 / 0.21	0.2 / 0.01	0.26	25		258	14	190	28	DWR
J. Orlando irrigation and domestic	10S/3E-23J1	6-27-63		406	8.1	44 / 2.20	16 / 1.36	18 / 0.78	0.5 / 0.01	0 / 0.00	190 / 3.11	12 / 0.25	20 / 0.56	28 / 0.45	0.2 / 0.01	0.15	38		252	18	178	22	DWR
E. H. Henderson domestic and irrigation	10S/3E-26J1	6-27-63		426	8.0	47 / 2.34	16 / 1.34	16 / 0.70	0.3 / 0.01	0 / 0.00	169 / 2.77	21 / 0.44	24 / 0.68	26 / 0.42	0.3 / 0.02	0.05	38		260	16	184	46	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MD8&Q1					GILROY-HOLLISTER BASIN (3-3) (Cont.)																	
Vowinkel domestic	10S/4E-17F1	6-27-63		735	8.3	43 / 2.14	46 / 3.73	53 / 2.30	15 / 0.04	0 / 0.00	387 / 6.34	19 / 0.40	45 / 1.27	3.6 / 0.06	0.3 / 0.02	0.23	28		427	28	294	0	DWR
E. Nichols domestic and irrigation	10S/4E-18G2	6-27-63		442	8.1	41 / 2.04	22 / 1.84	17 / 0.74	1.0 / 0.02	0 / 0.00	210 / 3.44	26 / 0.54	14 / 0.39	17 / 0.27	0.2 / 0.01	0.07	38		268	16	194	22	DWR
D. Wolfe irrigation and domestic	10S/4E-28D2	6-27-63		513	8.3	27 / 1.35	34 / 2.81	31 / 1.35	1.0 / 0.02	0.0 / 0.00	256 / 4.20	22 / 0.46	23 / 0.65	6.2 / 0.10	0.3 / 0.02	0.20	31		300	24	206	0	DWR
S. Armendariz irrigation and domestic	10S/4E-34L5	6-27-63		738	7.3	51 / 2.54	38 / 3.13	48 / 2.09	1.2 / 0.03	0 / 0.00	323 / 5.29	27 / 0.56	42 / 1.18	35 / 0.56	0.3 / 0.02	0.20	30		438	27	284	19	DWR
G. Hosang irrigation	11S/4E-4Q3	6-27-63		740	8.2	63 / 3.14	50 / 4.07	22 / 0.96	0.7 / 0.02	0 / 0.00	338 / 5.54	58 / 1.21	22 / 0.62	40 / 0.64	0.2 / 0.01	0.27	28		466	12	361	84	DWR
Mrs. J. D. Fair domestic	11S/4E-21B2	6-27-63		671	8.1	62 / 3.09	36 / 2.98	26 / 1.13	1.4 / 0.04	0 / 0.00	287 / 4.70	55 / 1.14	21 / 0.59	38 / 0.61	0.2 / 0.01	0.23	29		412	16	304	69	DWR
Mrs. C. R. Lanfri domestic	11S/5E-27M1	6-28-63		582	7.8	57 / 2.84	27 / 2.21	27 / 1.17	1.5 / 0.04	0 / 0.00	272 / 4.46	44 / 0.92	26 / 0.73	3.9 / 0.06	0.2 / 0.01	0.40	18		335	19	253	30	DWR
Ferry Morse Seed Co. irrigation	12S/4E-34P2	6-27-63		2010	7.7	189 / 9.43	78 / 6.39	156 / 6.79	2.6 / 0.07	0 / 0.00	346 / 5.67	464 / 9.66	241 / 6.80	26 / 0.42	0.4 / 0.02	0.64	27		1370	30	792	508	DWR
Olympia School domestic	12S/4E-35C1	6-27-63		1570	8.3	64 / 3.19	103 / 8.44	152 / 6.61	3.2 / 0.08	0 / 0.00	537 / 8.80	317 / 6.60	101 / 2.85	0.0 / 0.00	0.4 / 0.02	1.0	25		1040	36	582	142	DWR
M. Diaz domestic	12S/4E-36G1	6-27-63		1950	8.1	141 / 7.04	102 / 8.42	184 / 8.00	3.1 / 0.08	0 / 0.00	625 / 10.24	431 / 8.97	138 / 3.89	5.2 / 0.08	0.4 / 0.02	1.0	28		1360	34	774	262	DWR
W. Daly irrigation	12S/5E-9N2	6-28-63		1920	8.2	94 / 4.69	116 / 9.51	179 / 7.79	3.6 / 0.09	0 / 0.00	450 / 7.38	400 / 8.33	189 / 5.33	37 / 0.60	0.3 / 0.02	1.1	28		1270	35	711	342	DWR
F. Freitas & Furtado domestic and irrigation	12S/5E-33A1	6-27-63		1810	7.9	148 / 7.38	96 / 7.88	156 / 6.79	3.3 / 0.08	0 / 0.00	858 / 14.06	229 / 4.77	100 / 2.82	6.2 / 0.10	0.4 / 0.02	0.90	30		1150	31	764	60	DWR
P. Rovella domestic and irrigation	12S/5E-36A1	6-28-63		1330	8.2	24 / 1.20	9.7 / 0.80	276 / 12.01	2.1 / 0.05	0 / 0.00	490 / 8.03	64 / 1.33	150 / 4.23	0.6 / 0.01	0.2 / 0.01	1.4	28		774	85	100	0	DWR
Mrs. S. Brandon domestic and stock	12S/6E-7M2	6-28-63		438	7.8	22 / 1.10	11 / 0.92	55 / 2.39	4.0 / 0.10	0 / 0.00	235 / 3.85	0.0 / 0.00	25 / 0.70	1.5 / 0.02	0.2 / 0.01	0.85	67		294	53	101	0	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MDB&M					GILROY-HOLLISTER BASIN (3-3) (Cont.)																	
T. F. Broadfoot & Son domestic	12S/6E-19L2	6-28-63		1540	7.9	73 / 3.64	6.6 / 0.54	266 / 11.57	2.3 / 0.06	0 / 0.00	366 / 6.00	0.0 / 0.00	324 / 9.14	0.7 / 0.01	0.1 / 0.00	19	40		890	73	209	0	DWR
C. T. Pillsbury domestic and irrigation	12S/6E-31B1	6-28-63		2410	8.5	105 / 5.24	19 / 1.59	425 / 18.49	2.5 / 0.06	14 / 0.47	506 / 8.29	112 / 2.33	490 / 13.82	1.4 / 0.02	0.1 / 0.00	3.2	19		1390	73	342	0	DWR
First Presbyterian Church domestic	13S/5L-3J1	6-27-63		1430	7.8	109 / 5.44	49 / 4.05	135 / 5.87	2.8 / 0.07	0 / 0.00	372 / 6.10	266 / 5.54	128 / 3.61	8.9 / 0.14	0.4 / 0.02	1.1	21		909	38	473	170	DWR
V. Lompo irrigation	13S/5L-11G1	6-28-63		1380	7.9	100 / 4.99	45 / 3.72	141 / 6.13	3.0 / 0.08	0 / 0.00	374 / 6.13	251 / 5.22	110 / 3.10	15 / 0.24	0.4 / 0.02	1.00	24		855	41	436	129	DWR
						SALINAS VALLEY (3-4)																	
	12S/3E-19M1	7-30-62		350	8.1	19 / 0.95	11 / 0.90	39 / 1.70	0.8 / 0.03	0 / 0.00	100 / 1.63	3.8 / 0.08	58 / 1.63	8.5 / 0.14	0.2 / 0.01	0.0	44		228	48	93	11	DWR
	12S/3E-30A1	7-30-62	68	465	8.0	30 / 1.52	12 / 0.98	44 / 1.90	1.8 / 0.05	0 / 0.00	81 / 1.33	16 / 0.35	72 / 2.03	36 / 0.58	0.1 / 0.01	0.0	36		296	43	125	58	DWR
Monterey Bay Salt Co. domestic and industrial	13S/2L-7R1	7-16-62	72	820	8.5	18 / 0.85	4.6 / 0.38	170 / 7.40	3.5 / 0.09	9.0 / 0.30	226 / 3.70	86 / 1.81	96 / 2.70	0.9 / 0.01	0.1 / 0.01	0.2	47		588	85	62	0	DWR
R. Bowen irrigation	13S/2E-10J1	7-31-62	72	460	8.4	25 / 1.23	14 / 1.15	54 / 2.35	1.4 / 0.04	6 / 0.20	163 / 2.75	5.3 / 0.11	60 / 1.71	0.0 / 0.00	0.2 / 0.01	0.1	42		296	49	114	0	DWR
R. M. Cheek domestic and irrigation	13S/2L-13N1	7-31-62	71	237	7.9	9.4 / 0.47	6.8 / 0.56	30 / 1.30	0.9 / 0.03	0 / 0.00	67 / 1.10	2.9 / 0.06	38 / 1.07	1.8 / 0.03	0.2 / 0.01	0.1	46		178	55	52	0	DWR
M. Minhoto irrigation	13S/2E-16E1	8-6-62	68	1090	7.7	61 / 3.06	34 / 2.76	110 / 4.80	5.7 / 0.15	0 / 0.00	219 / 3.58	31 / 0.65	223 / 6.30	3.1 / 0.05	0.1 / 0.01	0.2	36		610	47	291	112	DWR
Delfino & Calcagno irrigation and domestic	13S/2E-17H1	7-16-62	66	1350	8.3	62 / 3.12	36 / 2.99	174 / 7.55	8.3 / 0.21	3.0 / 0.10	162 / 2.65	37 / 0.76	362 / 10.20	2.2 / 0.03	0.1 / 0.01	0.2	38		798	54	306	169	DWR
T. Leonardini domestic and irrigation	13S/2E-19R1	7-16-62	66	885	8.4	56 / 2.76	25 / 2.06	96 / 4.17	2.8 / 0.07	4.2 / 0.14	193 / 3.16	26 / 0.55	184 / 5.20	0.9 / 0.01	0.1 / 0.01	0.1	37		564	46	241	76	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Analyzed by c
	MDB&M					SALINAS VALLEY (3-4) (Cont.)																	
J. Tate domestic and irrigation	13S/2E-20J1	7-16-62	68	1130	8.1	65 / 3.24	37 / 3.05	105 / 4.55	2.5 / 0.06	0 / 0.00	113 / 1.85	68 / 1.42	264 / 7.45	0.0 / 0.00	0.1 / 0.01	0.1	43		698	42	315	222	DWR
J. J. King irrigation	13S/2E-31D2	7-16-62	70	685	8.3	30 / 1.47	16 / 1.26	89 / 3.87	2.8 / 0.07	3.0 / 0.10	170 / 2.80	21 / 0.45	123 / 3.45	1.3 / 0.02	0.1 / 0.01	0.2	37		422	58	136	0	DWR
Molera Estate domestic	13S/2E-31K2	7-17-62	67	545	8.5	22 / 1.13	14 / 1.15	66 / 3.30	2.4 / 0.06	9.0 / 0.30	215 / 3.52	11 / 0.22	60 / 1.70	1.3 / 0.02	0.1 / 0.01	0.1	29		348	58	114	0	DWR
E. Ballone irrigation	13S/2E-31M2	7-17-62	70	800	8.2	38 / 1.90	19 / 1.63	103 / 4.47	2.7 / 0.07	0 / 0.00	183 / 3.00	19 / 0.41	162 / 4.55	0.9 / 0.01	0.1 / 0.01	0.2	31		518	55	176	26	DWR
E. Ballone irrigation	13S/2E-31N2	7-17-62	72	980	8.2	60 / 2.99	28 / 3.31	95 / 4.13	3.2 / 0.08	0 / 0.00	114 / 1.87	51 / 1.07	229 / 6.45	1.3 / 0.02	0.1 / 0.01	0.2	33		642	39	315	222	DWR
irrigation	13S/2E-32A2	7-16-62	72	500	8.4	19 / 0.97	16 / 1.32	62 / 2.70	2.7 / 0.07	3.0 / 0.10	149 / 2.45	14 / 0.29	73 / 2.05	0.9 / 0.01	0.1 / 0.01	0.1	33		288	53	115	0	DWR
O. P. Overhouse irrigation	13S/2E-32C1	7-16-62	66	495	8.5	58 / 2.86	2.7 / 0.22	51 / 2.20	2.3 / 0.06	6.0 / 0.20	198 / 3.25	12 / 0.24	53 / 1.48	0.4 / 0.01	0.1 / 0.01	0.1	31		332	41	154	0	DWR
Molera Estate irrigation	13S/2E-32N1	7-17-62	70	490	8.4	24 / 1.23	11 / 0.88	67 / 2.90	2.4 / 0.06	3.6 / 0.12	167 / 2.73	22 / 0.47	60 / 1.70	0.9 / 0.01	0.1 / 0.01	0.1	33		334	57	106	63	DWR
C. Rissotti irrigation and domestic	13S/2E-33R1	7-19-62	66	735	8.4	76 / 3.79	22 / 1.82	53 / 2.30	2.8 / 0.07	9.0 / 0.30	223 / 3.65	74 / 1.54	82 / 2.30	8.5 / 0.14	0.1 / 0.01	0.1	34		494	29	280	82	DWR
R. Hollenbeck domestic and irrigation	13S/3E-4L1	8-1-62	69	320	8.0	14 / 0.72	9.5 / 0.74	37 / 1.60	1.1 / 0.03	0 / 0.00	87 / 1.44	3.4 / 0.07	46 / 1.30	9.8 / 0.16	0.1 / 0.01	0.2	44		230	52	73	1	DWR
F. B. Taganas domestic and irrigation	13S/3E-20B2	7-26-62	64	285	7.9	16 / 0.82	6.0 / 0.50	34 / 1.47	0.7 / 0.02	0 / 0.00	86 / 1.42	4.8 / 0.10	43 / 1.20	3.2 / 0.05	0.1 / 0.01	0.0	37		186	52	66	0	DWR
C. Lightfoot domestic and irrigation	13S/3E-29A1	7-26-62	64	570	7.9	19 / 0.94	15 / 1.20	69 / 3.00	1.1 / 0.03	0 / 0.00	82 / 1.35	13 / 0.28	124 / 3.50	2.7 / 0.04	0.2 / 0.01	0.0	44		336	58	107	39	DWR
V. Coto domestic	14S/1E-24Q2	7-12-62	62	1060	7.0	63 / 3.20	35 / 2.24	103 / 4.47	2.0 / 0.05	0 / 0.00	46 / 0.75	73 / 1.53	145 / 4.10	208 / 3.35	0.1 / 0.01	0.1	29		720	47	300	262	DWR
Marina Del Mar School domestic and irrigation	14S/1E-25K1	7-12-62	60	500	7.0	26 / 1.30	16 / 1.28	49 / 2.13	1.9 / 0.05	0 / 0.00	37 / 0.60	20 / 0.43	84 / 2.35	77 / 1.25	0.1 / 0.01	0.1	23		290	45	129	99	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MDB&M					SALINAS VALLEY (3-4) (Cont.)																	
Mrs. L. Martin irrigation and domestic	14S/2E-6Q1	7-17-62	72	535	8.4	34 / 1.69	10 / 0.84	70 / 3.05	3.2 / 0.08	9.0 / 0.30	193 / 3.17	30 / 0.63	60 / 1.60	1.3 / 0.02	0.1 / 0.01	0.1	35		366	54	127	0	DWR
E. Struve irrigation	14S/2E-6R2	7-17-62	72	510	8.4	34 / 1.72	11 / 0.94	63 / 2.75	2.3 / 0.06	6.0 / 0.20	197 / 3.23	23 / 0.48	51 / 1.43	1.3 / 0.02	0.1 / 0.01	0.1	35		348	50	133	0	DWR
J. Jefferson irrigation	14S/2E-8M2	8-7-62	72	500	7.8	34 / 1.71	13 / 1.12	53 / 2.30	23 / 0.06	0 / 0.00	206 / 3.38	150 / 0.33	50 / 1.40	1.3 / 0.02	0.2 / 0.01	0.1	34		304	44	142	0	DWR
J. P. Rogers domestic and irrigation	14S/2E-11D1	7-19-62	66	455	8.2	28 / 1.36	22 / 1.75	40 / 1.75	2.3 / 0.06	0 / 0.00	180 / 2.95	12 / 0.25	48 / 1.35	1.8 / 0.03	0.1 / 0.01	0.1	36		298	35	152	5	DWR
E. C. Eaton irrigation	14S/2E-12Q1	7-19-62	64	500	8.2	70 / 3.48	6.7 / 0.56	33 / 1.43	1.8 / 0.05	0 / 0.00	243 / 3.98	11 / 0.24	41 / 1.15	3.6 / 0.06	0.1 / 0.01	0.0	22		334	26	202	3	DWR
L. A. Wilder domestic	14S/2E-14N1	7-18-62	66	585	8.3	56 / 2.78	13 / 1.13	55 / 2.40	3.7 / 0.09	3.0 / 0.10	201 / 3.30	48 / 1.00	62 / 1.75	4.0 / 0.06	0.1 / 0.01	0.1	32		384	37	195	25	DWR
Monterey County Bank irrigation and domestic	14S/2E-15L1	7-18-62	66	565	8.4	44 / 2.22	18 / 1.54	53 / 2.30	3.0 / 0.08	6.0 / 0.20	148 / 2.53	102 / 2.12	43 / 1.20	0.4 / 0.01	0.1 / 0.01	0.2	31		408	37	188	52	DWR
J. G. Armstrong Co. irrigation	14S/2E-18D1	7-18-62	66	1055	8.0	80 / 3.96	35 / 2.93	98 / 4.25	4.0 / 0.10	0 / 0.00	113 / 1.85	185 / 3.85	190 / 5.35	4.0 / 0.06	0.1 / 0.01	0.2	34		738	35	345	252	DWR
A. H. Bordges irrigation	14S/2E-23J1	8-7-62	70	750	8.1	52 / 2.58	27 / 2.18	74 / 3.20	4.2 / 0.11	0 / 0.00	132 / 2.17	138 / 2.88	99 / 2.80	4.0 / 0.06	0.1 / 0.01	0.2	33		512	40	238	130	DWR
M. T. DeSerpa irrigation	14S/2E-24F1	7-19-62	68	580	8.4	54 / 2.74	15 / 1.20	52 / 2.25	2.7 / 0.07	6.0 / 0.20	195 / 3.20	41 / 0.87	63 / 1.78	2.2 / 0.04	0.1 / 0.01	0.1	29		388	36	197	27	DWR
M. T. DeSerpa irrigation	14S/2E-25B1	7-12-62	64	1200	7.5	110 / 5.51	39 / 3.17	94 / 4.10	3.8 / 0.10	0 / 0.00	302 / 4.95	156 / 3.25	162 / 4.55	5.3 / 0.09	0.1 / 0.01	0.3	26		806	32	434	186	DWR
M. Bordgers irrigation and domestic	14S/2E-26A1	7-18-62	66	1180	8.2	102 / 5.11	43 / 3.47	98 / 4.25	4.6 / 0.12	0 / 0.00	195 / 3.20	194 / 4.04	195 / 5.50	0.0 / 0.00	0.1 / 0.01	0.0	33		828	33	429	269	DWR
A. Goodall domestic	14S/2E-30P2	7-12-62	63	510	7.3	23 / 1.15	13 / 1.05	53 / 2.30	1.8 / 0.05	0 / 0.00	55 / 0.90	17 / 0.36	69 / 1.95	73 / 1.18	0.1 / 0.01	0.1	28		308	50	110	65	DWR
D. P. McFadden irrigation	14S/2E-35Q1	8-7-62	70	450	8.2	43 / 2.14	7.1 / 0.59	28 / 1.20	2.7 / 0.07	3.0 / 0.10	107 / 1.75	81 / 1.68	17 / 0.48	0.9 / 0.01	0.1 / 0.01	0.1	30		284	30	137	44	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	M086M					SALINAS VALLEY (3-4) (Cont.)																	
A. Lanini irrigation and domestic	14S/3E-30E1	7-12-62	66	1850	7.4	323 / 11.13	44 / 3.60	157 / 6.83	4.3 / 0.11	0 / 0.00	464 / 7.60	233 / 4.85	312 / 8.80	8.5 / 0.14	0.2 / 0.01	0.4	24		1314	32	742	362	DWR
irrigation	14S/3E-30F1	7-12-62	62	1420	7.9	78 / 3.92	55 / 4.45	157 / 6.83	3.8 / 0.10	0 / 0.00	261 / 4.28	152 / 3.16	257 / 7.25	22 / 0.35	0.2 / 0.01	0.3	27		926	45	419	205	DWR
P. G. & E. municipal	14S/3E-33G1	7-20-62	70	625	8.4	50 / 2.53	21 / 1.71	53 / 2.30	2.7 / 0.07	6.0 / 0.20	174 / 2.85	58 / 1.20	78 / 2.20	3.6 / 0.06	0.1 / 0.01	0.1	38		426	35	212	65	DWR
P. Calabrese domestic	15S/1E-22C1	7-11-62	63	705	8.2	49 / 2.45	19 / 1.58	75 / 3.25	2.8 / 0.07	0 / 0.00	165 / 2.70	54 / 1.12	114 / 3.20	8.5 / 0.14	0.2 / 0.01	0.1	35		438	44	202	67	DWR
O. Veach domestic	15S/1E-23G1	7-11-62	72	226	7.2	11 / 0.53	2.9 / 0.24	32 / 1.40	1.1 / 0.03	0 / 0.00	53 / 0.86	3.4 / 0.07	40 / 1.13	0.0 / 0.00	0.1 / 0.01	0.0	30		132	64	38	0	DWR
J. Sirno domestic	15S/1F-26N2	7-11-62	67	500	7.5	20 / 0.99	10 / 0.85	63 / 2.75	2.4 / 0.06	0 / 0.00	59 / 0.97	14 / 0.28	103 / 2.90	33 / 0.54	0.1 / 0.01	0.1	31		300	59	92	48	DWR
irrigation and domestic	15S/2E-1A3	7-10-62	66	450	8.3	49 / 2.43	10 / 0.83	28 / 1.20	3.0 / 0.08	1.5 / 0.05	150 / 2.47	74 / 1.54	13 / 0.37	0.9 / 0.01	0.2 / 0.01	0.1	28		296		163	37	DWR
L. Jacks irrigation	15S/2E-2Q1	7-9-62	64	1100	7.9	86 / 4.31	49 / 4.03	74 / 3.20	3.3 / 0.09	0 / 0.00	307 / 5.03	208 / 4.32	74 / 2.10	0.00 / 0.00	0.1 / 0.01	0.2	40		744	27	417	165	DWR
irrigation	15S/3E-4K3	8-7-62	70	570	8.1	36 / 1.82	19 / 1.56	54 / 2.35	3.7 / 0.09	0 / 0.00	122 / 2.00	133 / 2.77	38 / 1.05	0.9 / 0.01	0.2 / 0.01	0.2	28		378	40	169	69	DWR
irrigation	15S/3E-5Q4	8-7-62	64	2000	8.0	107 / 5.35	71 / 5.79	255 / 11.10	6.5 / 0.17	0 / 0.00	157 / 2.58	624 / 12.98	243 / 6.85	0.0 / 0.00	0.4 / 0.02	0.6	30		1508	50	557	428	DWR
F. Giottinini domestic and irrigation	15S/3E-7D1	7-20-62	68	1100	8.0	87 / 4.37	56 / 4.64	77 / 3.33	4.3 / 0.11	0 / 0.00	143 / 2.35	302 / 6.28	130 / 3.65	0.0 / 0.00	0.2 / 0.01	0.3	31		650	27	450	332	DWR
Spreckles Sugar Co. irrigation	15S/3E-16M1	8-10-62	64	870	8.1	58 / 2.90	51 / 4.24	51 / 2.20	3.9 / 0.10	0 / 0.00	189 / 3.10	209 / 4.35	66 / 1.85	1.8 / 0.02	0.1 / 0.01	0.2	26		610	23	357	202	DWR
J. Violini irrigation	15S/3E-17P1	8-10-62	66	830	8.5	16 / 0.81	54 / 4.43	92 / 4.00	5.2 / 0.13	12 / 0.40	301 / 4.92	30 / 0.62	116 / 3.25	0.0 / 0.00	0.1 / 0.01	0.2	33		494	43	262	0	DWR
J. Hugo domestic	16S/2E-1L1	7-25-62	67	600	8.2	29 / 1.47	13 / 1.13	70 / 3.05	2.2 / 0.06	0 / 0.00	144 / 2.36	16 / 0.34	110 / 3.10	3.6 / 0.06	0.4 / 0.02	0.1	40		366	53	130	12	DWR
Corral deTierra Country Club domestic and irrigation	16S/2E-3J1	7-25-62	68	830	8.5	81 / 4.08	16 / 1.34	78 / 3.40	2.6 / 0.07	15 / 0.50	244 / 4.00	40 / 0.85	124 / 3.50	0.0 / 0.00	0.2 / 0.01	0.1	9		474	38	271	46	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C ppm	Analyzed by c
	MDB&M					SALINAS VALLEY (3-4) (Cont.)																	
C. Phillips domestic	16S/2E-12G1	7-25-62	73	1060	8.4	54 / 2.72	22 / 1.78	140 / 6.10	3.3 / 0.08	0 / 0.00	152 / 2.50	34 / 0.70	254 / 7.15	6.1 / 0.10	0.1 / 0.01	0.1	44		624	57	225	100	DWR
K. R. Nutting irrigation	16S/4E-24A1	7-26-62	66	1350	8.2	89 / 4.46	62 / 5.08	122 / 5.30	3.5 / 0.09	0 / 0.00	148 / 2.43	403 / 8.41	117 / 3.30	57 / 0.92	0.2 / 0.01	0.4	36		1044	35	477	355	DWR
J. C. Twisselman irrigation	16S/4E-25K1	7-27-62	64	1120	8.2	76 / 3.84	56 / 4.55	103 / 4.47	3.9 / 0.10	0 / 0.00	238 / 3.90	331 / 6.90	74 / 2.10	0.0 / 0.00	0.1 / 0.01	0.3	32		810	34	420	225	DWR
C. Doud irrigation	17S/5E-9Q1	7-31-62	64	610	8.4	75 / 3.76	28 / 2.30	30 / 1.30	2.2 / 0.06	7.2 / 0.24	221 / 3.61	125 / 2.61	28 / 0.80	0.0 / 0.00	0.1 / 0.01	0.1	27		450	18	303	11	DWR
irrigation	17S/6E-7Q1	7-13-62	68	620	8.2	40 / 2.02	21 / 1.68	58 / 2.50	2.9 / 0.07	0 / 0.00	134 / 2.20	103 / 2.14	62 / 1.75	4.9 / 0.08	0.1 / 0.01	0.2	36		432	40	185	75	DWR
N. Baker irrigation	17S/6E-27K1	7-31-62	68	1100	8.1	62 / 3.08	51 / 4.22	107 / 4.65	3.1 / 0.08	0 / 0.00	149 / 2.45	337 / 7.03	94 / 2.65	5.8 / 0.09	0.1 / 0.01	0.4	30		816	38	365	243	DWR
L. M. & V. Jacks irrigation	18S/6E-1E1	8-3-62	66	930	7.6	40 / 2.02	30 / 2.48	120 / 5.20	4.2 / 0.11	0 / 0.00	207 / 3.40	222 / 4.62	50 / 1.40	33 / 0.53	0.1 / 0.01	0.5	26		632	53	225	55	DWR
L. Jacks irrigation	18S/6E-2N1	8-3-62	67	1170	7.9	119 / 5.97	45 / 3.65	70 / 3.05	5.6 / 0.14	0 / 0.00	119 / 1.95	365 / 7.61	87 / 2.45	57 / 0.92	0.1 / 0.01	0.1	21		812	24	481	383	DWR
F. W. Smith irrigation	18S/6E-28J1	8-3-62	68	440	8.2	48 / 2.40	13 / 1.06	23 / 1.00	2.4 / 0.06	0 / 0.00	180 / 2.55	69 / 1.45	13 / 0.35	3.4 / 0.06	0.1 / 0.01	0.1	28		300	22	173	46	DWR
E. Pincini irrigation	18S/7E-29G1	8-3-62	66	2400	8.0	263 / 13.08	115 / 9.48	149 / 6.47	4.4 / 0.11	0 / 0.00	159 / 2.60	870 / 18.13	287 / 8.10	37 / 0.60	0.1 / 0.01	0.4	28		2032	22	1128	998	DWR
Salinas Land Co. irrigation	19S/7E-10P1	8-9-62	61	760	8.2	53 / 2.65	35 / 2.90	50 / 2.17	2.0 / 0.05	0 / 0.00	146 / 2.40	99 / 2.06	108 / 3.05	11 / 0.18	0.2 / 0.01	0.3	25		504	28	277	157	DWR
D. M. Bingaman domestic and irrigation	19S/7E-13D2	8-8-62	65	1020	8.2	37 / 1.85	57 / 4.72	102 / 4.43	2.7 / 0.07	0 / 0.00	176 / 2.88	283 / 5.89	64 / 1.81	37 / 0.60	0.2 / 0.01	0.6	27		732	40	328	184	DWR
irrigation	19S/8E-32A1	8-8-62	65	3500	8.4	281 / 13.99	70 / 5.70	500 / 21.75	8.5 / 0.22	13 / 0.44	260 / 4.26	1335 / 27.80	316 / 8.90	24 / 0.38	0.4 / 0.02	2.0	23		2980	52	985	750	DWR
G. Ross irrigation	19S/8E-33R1	8-8-62	65	2900	8.3	125 / 6.25	130 / 10.71	360 / 15.65	6.7 / 0.17	3.0 / 0.10	188 / 3.08	1057 / 22.00	279 / 7.85	25 / 0.40	0.4 / 0.02	1.8	24		2210	47	848	689	DWR
A. Duarte irrigation	20S/8E-5R1	8-8-62	66	1360	7.9	67 / 3.34	64 / 5.25	160 / 6.95	4.5 / 0.12	0 / 0.00	217 / 3.55	363 / 7.56	144 / 4.05	17 / 0.28	0.2 / 0.01	1.1	31		1096	44	430	253	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Analyzed by c
	MDB&M							SALINAS VALLEY (3-4) (Cont.)															
irrigation	20S/8E-24J2	8-8-62	70	3200	8.2	164 / 8.22	63 / 5.20	445 / 19.35	11 / 0.29	0 / 0.00	122 / 2.00	492 / 10.24	754 / 21.25	2.7 / 0.04	0.1 / 0.01	2.8	29		2300	58	671	571	DWR
irrigation	21S/9E-7J1	8-7-62	77	1700	8.1	137 / 6.85	80 / 6.62	132 / 5.73	5.7 / 0.15	0 / 0.00	180 / 2.95	530 / 11.04	158 / 4.45	36 / 0.58	0.2 / 0.01	0.4	32		1328	30	674	527	DWR
K. & H. Eade irrigation	21S/9E-24L1	8-7-62		2230	8.0	262 / 13.04	61 / 4.97	195 / 8.47	63 / 0.16	0 / 0.00	214 / 3.50	812 / 17.94	170 / 4.80	33 / 0.53	0.2 / 0.01	0.8	29		2030	32	901	726	DWR
W. C. Glau irrigation	22S/10E-17N1	8-7-62		520	8.4	36 / 1.82	21 / 1.70	35 / 1.50	1.5 / 0.04	4.2 / 0.14	160 / 2.61	73 / 1.52	25 / 0.70	2.3 / 0.04	0.2 / 0.01	0.2	25		336	30	176	39	DWR
L. Rosenberg irrigation	22S/10E-34G1	8-7-62	67	700	8.4	32 / 1.60	29 / 2.36	70 / 3.05	3.4 / 0.09	3.0 / 0.10	161 / 2.63	123 / 2.57	62 / 1.75	4.1 / 0.07	0.2 / 0.01	0.4	34		458	43	198	61	DWR
E. Weferling irrigation	23S/8E-2E1	8-6-62		410	8.0	40 / 2.00	14 / 1.15	18 / 0.80	2.6 / 0.07	0 / 0.00	65 / 1.07	79 / 1.64	36 / 1.00	15 / 0.25	0.2 / 0.01	0.1	35		282	20	157	104	DWR
J. Martinus irrigation	23S/8E-8K1	8-6-62		300	8.2	27 / 1.37	7.2 / 0.60	24 / 1.05	1.4 / 0.04	0 / 0.00	116 / 1.90	14 / 0.31	22 / 0.62	7.7 / 0.12	0.2 / 0.01	0.1	30		206	34	98	3	DWR
M. Martin, Jr.	23S/9E-29C1	8-6-62		600	7.9	65 / 3.24	21 / 1.72	30 / 1.30	2.4 / 0.06	0 / 0.00	235 / 3.85	55 / 1.15	38 / 1.05	10 / 0.16	0.2 / 0.01	0.1	36		408	21	248	56	DWR
	24S/12E-17L2	9-23-63	74	1462	7.3	101 / 5.04	63 / 5.18	140 / 6.09	5 / 0.13	0 / 0.00	320 / 5.24	469 / 9.76	47 / 1.33	5.5 / 0.09	0.6	0.46	50		1075		511		DWR
	24S/15E-17F1	9-24-63	66	1664	7.8	52 / 2.59	100 / 8.22	180 / 7.83	4 / 0.10	0 / 0.00	525 / 8.60	294 / 6.12	145 / 4.09	4.0 / 0.06	0.5	1.35	40		1020		541		DWR
	25S/12E-16N1	9-23-63	68	814	7.6	37 / 1.85	40 / 3.29	80 / 3.48	3 / 0.08	0 / 0.00	303 / 4.97	76 / 1.58	68 / 1.92	15 / 0.24	0.7	0.35	47		480		257		DWR
	26S/14E-35D1	9-26-63	72	478	7.6	41 / 2.05	10 / 0.82	42 / 1.83	4 / 0.10	0 / 0.00	176 / 2.88	24 / 0.50	43 / 1.21	10 / 0.16	0.5	0.06	40		300		144		DWR
	26S/16E-31B1	9-26-63	74	1634	7.9	34 / 1.70	21 / 1.73	310 / 13.48	2 / 0.05	0 / 0.00	339 / 5.56	354 / 7.37	107 / 3.02	52 / 0.84	1.2	2.00	32		1060		172		DWR
	27S/13E-36R1	9-27-63		786	7.4	105 / 5.24	17 / 1.40	40 / 1.74	3 / 0.08	0 / 0.00	312 / 5.11	48 / 1.00	69 / 1.95	19 / 0.31	0.5	0.06	60		520		332		DWR
								CARMEL VALLEY (3-7)															
R. Odello irrigation	16S/1W-13L1	8-14-62	63	700	8.5	68 / 3.42	23 / 1.87	47 / 2.05	3.6 / 0.09	9.0 / 0.30	204 / 3.35	98 / 2.04	61 / 1.72	1.8 / 0.02	0.4 / 0.02	0.1	26		460	20	265	82	DWR

TABLE E-1

ANALYSES OF GROUND WATER
1963

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micromhos at 25° C)	pH	Mineral constituents in parts per million / equivalents per million												Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$		Analyzed by c
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]			Total ppm	N.C ppm	
	MDB&M							CARMEL	VALLEY	(3-7)	(Cont.)											
Carmel Sewage Treatment Plant industrial	16S/1W-13L2	7-11-62	62	735	8.4	70 / 3.49	23 / 1.92	64 / 2.80	2.9 / 0.07	3.0 / 0.10	226 / 3.70	85 / 1.76	85 / 2.40	2.3 / 0.04	0.4 / 0.02	0.1	26		508	33	270	80	DWR
B. Odello irrigation	16S/1W-13Q2	8-14-62	62	830	8.4	83 / 4.17	23 / 1.94	60 / 2.60	4.1 / 0.11	7.2 / 0.24	208 / 3.41	127 / 2.65	78 / 2.20	21 / 0.33	0.2 / 0.01	0.1	29		660	30	306	123	DWR
	16S/1E-16L1	7-10-62	73	300	8.2	36 / 1.78	8.6 / 0.72	18 / 0.80	2.1 / 0.05	0 / 0.00	114 / 1.87	45 / 0.95	14 / 0.39	0.0 / 0.00	0.2 / 0.01	0.0	23		220	24	125	32	DWR
E. Haber irrigation	16S/1E-16N1	7-10-62	71	660	8.1	52 / 2.61	25 / 2.06	51 / 2.20	2.3 / 0.06	0 / 0.00	165 / 2.70	118 / 2.46	58 / 1.63	0.9 / 0.01	0.4 / 0.02	0.1	33		446	32	233	98	DWR
Harbert irrigation and domestic	16S/1E-17G1	7-10-62	66	1180	7.7	150 / 7.49	18 / 1.53	94 / 4.10	3.7 / 0.09	0 / 0.00	354 / 5.80	159 / 3.33	133 / 3.75	0.9 / 0.01	0.1 / 0.01	0.2	19		838	31	451	161	DWR
irrigation	16S/1E-18K1	7-11-62	62	610	8.4	62 / 3.12	19 / 1.60	41 / 1.80	3.4 / 0.09	4.2 / 0.14	196 / 3.21	85 / 1.77	48 / 1.35	0.4 / 0.01	0.1 / 0.01	0.1	27		414	27	236	69	DWR
R. Martin irrigation	16S/1E-23F1	7-10-62	66	880	8.0	63 / 3.14	32 / 2.59	89 / 3.83	3.5 / 0.09	0 / 0.00	122 / 2.00	247 / 5.15	84 / 2.35	0.0 / 0.00	0.6 / 0.03	0.2	31		670	40	287	187	DWR
E. Holt irrigation	16S/1E-25B1	7-9-62	65	460	8.1	42 / 2.07	15 / 1.18	37 / 1.60	2.8 / 0.07	0 / 0.00	137 / 2.25	80 / 1.66	30 / 0.85	0.0 / 0.00	0.4 / 0.02	0.1	18		324	33	162	50	DWR

RADIOASSAY OF GROUND WATER

1963

Well Number	Date Sampled	Date Analyzed	Radioassay in Pico Curies Per Liter				Gross Activity
			Suspended Activity		Dissolved Activity		
			Alpha	Beta	Alpha	Beta	
			SAN FRANCISCO BAY REGION (No. 2)				
			CLAYTON VALLEY 2-5				
1N/1W-4A1	7-11-62	8-9-62					0 ± 3.8
1N/1W-4R1	7-11-62	8-9-62					0 ± 3.9
2N/1W-30J1	7-10-62	9-12-62					5.5 ± 3.4
2N/1W-30K1	7-10-62	8-9-62					0 ± 3.8
2N/1W-31D1	7-10-62	8-9-62					0 ± 3.8
2N/2W-13P1	7-10-62	8-9-62					2.4 ± 3.9
2N/2W-26B1	7-10-62	8-9-62					2.9 ± 3.9
2N/2W-36J1	7-11-62	9-11-62					1.0 ± 3.4
			YGNACIO VALLEY 2-6				
1N/1W-7K1	7-11-62	8-9-62					0 ± 3.9
1N/1W-29G1	7-11-62	8-9-62					0 ± 3.8
1N/2W-11N1	7-11-62	8-9-62					4.0 ± 3.9
1N/2W-13P1	7-11-62	8-9-62					1.9 ± 4.0

TABLE E-2

RADIOASSAY OF GROUND WATER

1963

Well Number	Date Sampled	Date Analyzed	Radioassay in Pico Curies Per Liter				
			Suspended Activity		Dissolved Activity		Gross Activity
			Alpha	Beta	Alpha	Beta	
			YGNACIO VALLEY 2-6 (Cont.)				
2N/2W-27R1	7-10-62	8-9-62					0 ± 3.9
2N/2W-36E1	7-10-62	8-9-62					0.4 ± 4.0
			SANTA CLARA VALLEY 2-9 (East Bay)				
4S/1W-21F2	9-6-62	9-24-62	0 ± 0.14		0.06 ± 0.16		
		9-21-62		0 ± 4.6		0 ± 4.6	
4S/1W-21F2	12-5-62	12-21-62	0 ± 0.17		0 ± 0.16		
		12-18-62		2.5 ± 4.5		0.4 ± 4.5	
4S/1W-21F2	3-7-63	3-17-63	0.1 ± 0.2		0.0 ± 0.1		
		3-15-63		8.6 ± 4.9		16.8 ± 5.0	
4S/1W-21F2	6-6-63	7-28-63	0 ± 0.1		0 ± 0.2		
		7-26-63		0 ± 4.5		6.6 ± 4.6	
4S/1W-21M1	9-6-62	9-24-62	0 ± 0.19		0 ± 0.18		
		9-21-62		0 ± 4.5		0 ± 4.6	
4S/1W-21M1	12-5-62	12-21-62	0 ± 0.18		0 ± 0.20		
		12-18-62		0 ± 4.5		4.4 ± 4.6	

TABLE E-2

RADIOASSAY OF GROUND WATER

1963

Well Number	Date Sampled	Date Analyzed	Radioassay in Pico Curies Per Liter				Gross Activity
			Suspended Activity		Dissolved Activity		
			Alpha	Beta	Alpha	Beta	
			SANTA CLARA VALLEY 2-9 (East Bay) (Cont.)				
4S/1W-21M1	3-7-63	3-17-63	0.0 ± 0.1		0.0 ± 0.1		
		3-15-63		11.7 ± 4.9		32.2 ± 5.2	
4S/1W-21M1	6-6-63	7-28-63	0 ± 0.1		0.2 ± 0.2		
		7-26-63		0.6 ± 4.6		1.0 ± 4.6	
6S/1E-7C1	8-62	10-8-62					1.8 ± 3.3
6S/1E-21G1	8-62	10-8-62					0 ± 3.3
6S/1W-11B1	8-62	10-8-62					0 ± 3.3
6S/1W-14E1	8-62	10-8-62					0 ± 3.3
6S/1W-16A1	8-62	10-8-62					0 ± 3.4
6S/1W-17N2	8-62	10-8-62					0 ± 3.4
6S/1W-26D2	9-13-62	10-8-62					2.0 ± 3.3
6S/1W-28R1	8-62	10-8-62					0 ± 3.3
6S/1W-29C1	8-62	10-8-62					0 ± 3.2
6S/1W-30M1	8-62	10-8-62					0 ± 3.4
6S/2W-9H1	8-62	10-8-62					0 ± 3.3

TABLE E-2

RADIOASSAY OF GROUND WATER

1963

Well Number	Date Sampled	Date Analyzed	Radioassay in Pico Curies Per Liter				
			Suspended Activity		Dissolved Activity		Gross Activity
			Alpha	Beta	Alpha	Beta	
		SANTA CLARA VALLEY 2-9 (East Bay) (Cont.)					
6S/2W-9K2	8-62	10-8-62					0 ± 3.2
6S/2W-20N1	8-62	10-8-62					0 ± 3.1
6S/2W-21A	8-62	10-8-62					0 ± 3.2
6S/2W-24M3	8-62	10-8-62					0 ± 3.4
6S/2W-29D2	8-62	10-8-62					0 ± 3.2
6S/2W-34M1	8-62	10-8-62					0 ± 3.2
6S/2W-36H2	8-62	10-8-62					0 ± 3.3
7S/1W-5L	8-62	10-8-62					0 ± 3.1
		LIVERMORE VALLEY 2-10					
2S/2W-27K1	4-11-62	5-11-62					0 ± 4.0
2S/2W-35G2	4-11-62	5-11-62					0 ± 3.84
3S/2E-8H1	4-11-62	5-11-62					0 ± 3.8
4S/1E-3K1	4-4-62	5-11-62					0 ± 3.9
4S/1E-10G1	4-10-62	5-11-62					1.28 ± 4.2
4S/1E-10H1	4-10-62	5-11-62					36.31 ± 4.6

RADIOASSAY OF GROUND WATER

1963

Well Number	Date Sampled	Date Analyzed	Radioassay in Pico Curies Per Liter				
			Suspended Activity		Dissolved Activity		Gross Activity
			Alpha	Beta	Alpha	Beta	
			CENTRAL COASTAL REGION (No. 3)				
			PAJARO VALLEY 3-2				
12S/2E-30E1	7-23-62	10-22-62					0 ± 3.4
12S/2E-30N1	7-23-62	10-8-62					0 ± 3.4
12S/2E-31C1	7-23-62	10-8-62					0 ± 3.3
12S/2E-31K1	7-24-62	10-8-62					0 ± 3.4
12S/2E-32C1	7-24-62	9-26-62					5.1 ± 3.5
13S/1E-1A1	7-23-62	10-8-62					0 ± 3.4
13S/2E-6E2	7-24-62	9-26-62					4.2 ± 3.5
13S/2E-1K1	7-31-62	9-26-62					1.6 ± 3.5
			SALINAS VALLEY 3-4				
13S/2E-10J1	7-31-62	9-26-62					0 ± 3.4
			CARMEL VALLEY 3-7				
15S/1E-22C1	7-11-62	9-26-62					0 ± 3.4
15S/1E-23G1	7-11-62	9-26-62					0 ± 3.4

TABLE E-2

RADIOASSAY OF GROUND WATER

1963

Well Number	Date Sampled	Date Analyzed	Radioassay in Pico Curies Per Liter				
			Suspended Activity		Dissolved Activity		Gross Activity
			Alpha	Beta	Alpha	Beta	
			CARMEL VALLEY 3-7 (Cont.)				
15S/1E-26N2	7-11-62	9-26-62					3.3 ± 3.9
16S/1E-16L1	7-10-62	9-26-62					1.6 ± 3.4
16S/1E-16N1	7-10-62	9-26-62					0 ± 3.5
16S/1E-17G1	7-10-62	9-26-62					0 ± 3.4
16S/1E-18K1	7-11-62	9-26-62					3.2 ± 3.4
16S/1E-23F1	7-10-62	9-26-62					2.1 ± 3.4
16S/1E-25B1	7-9-62	9-26-62					0.1 ± 3.4
16S/1W-13L2	7-11-62	9-26-62					0 ± 3.3

SURFAC

1 SACRAMENTO RIVER AT COLLINSVILLE
2 SUISUN BAY AT BENICIA ARSENAL

SUB

8a RUSSIAN RIVER NEAR HOPLAND
8b NAVARRO RIVER NEAR NAVARRO
8c BIG RIVER NEAR MOUTH
9 RUSSIAN RIVER NEAR HEALDSBURG
9a GUALALA RIVER, SOUTH FORK, NEAR ANNAPOLIS
10 RUSSIAN RIVER AT GUERNEVILLE
10a RUSSIAN RIVER, EAST FORK, AT POTT VALLEY POWERHOUSE
10c NOYO RIVER NEAR FORT BRAGG
43 SALINAS RIVER NEAR SPRECKELS
43a SALINAS RIVER AT PASO ROBLES
43b NACIMIENTO RIVER NEAR SAN MIGUEL
43c SALINAS RIVER NEAR BRADLEY
43d SAN ANTONIO RIVER NEAR PLEYTO
71 ARROYO DEL VALLE NEAR LIVERMORE
72 NAPA RIVER NEAR ST. HELENA
73 ALAMEDA CREEK NEAR NILES
74 LOS GATOS CREEK NEAR LOS GATOS
75 SAN LORENZO RIVER AT BIG TREES N FELTON
76 SOQUEL CREEK AT SOQUEL
77 PAJARO RIVER NEAR CHITTENDEN
77a SAN BENITO RIVER NEAR BEAR VALLE FIRE STATION
82 COYOTE CREEK NEAR MADRONE
83 CARMEL RIVER AT ROBLES DEL RIO
96 UVAS CREEK NEAR MORGAN HILL
200 ALISAL CREEK ON OLD STAGE ROAD SALINAS
201 ALTAMONT CREEK AT ALTAMONT TURN OF SOUTH BAY AQUEDUCT
202 ARROYO DE LA LAGUNA AT VERONA
203 ARROYO SECO RIVER NEAR SOLEDAD
204 BEAN CREEK ONE MILE EAST OF FEL
205 BEAR CREEK AT BOULDER CREEK
206 BEAR CREEK FOUR MILES NORTHEAST BOULDER CREEK

Foldout too large for digitization

May be added at a later date

GROUND WA

CENTRAL

NORTH COASTAL REGION

1-14.0	Potter Valle
1-15.0	Ukiah Valle
1-16.0	Sanel Valle
1-17.0	Alexander Vall
1-18.0	Santa R.a. . ..
1-18.01	Santa R a Ar
1-18.02	medium gr Ar
1-98.	Lower Russian R.

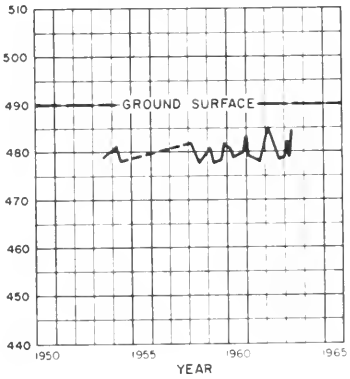
SAN FRANCISCO BAY REGION

2-1.0	Petalum Vall
2-2.	Napa-S noma ..lle
2-2.01	Napa Valley
2-2.02	Sonoma Vall
2-3.0	Suisun-Fairfie
2-5.0	Clayton Vall
2-6.0	Ygnacio Valley
2-7.0	Santa Clara V
2-9.01	East Bay Ar
2-9.02	South Bay Are
2-12.0	Livermore Valley
2-12.05	Half Moon Bay Ter
2-14.0	San Gregori Vall
2-15.0	Pescadero Valle

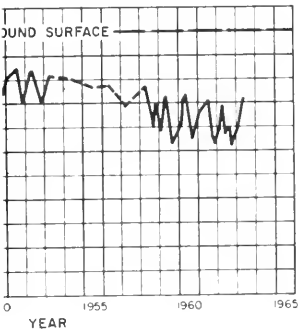
Foldout too large for digitization

May be added at a later date

SANEL VALLEY (1-16.00)
MENDOCINO COUNTY
WELL 13N/11W-18E1, M.D.B.&M.
GROUND SURFACE ELEVATION 490'



, SONOMA COUNTY (1-18.00)
SA AREA (1-18.01)
8W-13R1, M.D.B.&M.
SURFACE ELEVATION 118'



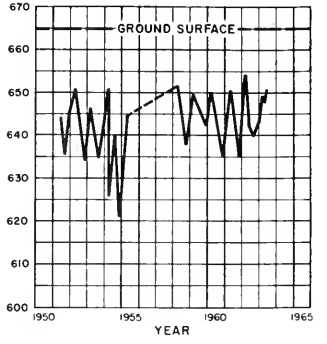
EASUREMENTS MADE AT INTERVALS
)R MORE

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
BAY AREA BRANCH
HYDROLOGIC DATA
CENTRAL COASTAL AREA

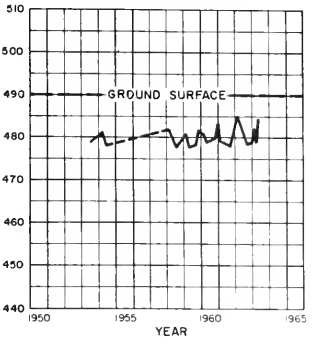
FLUCTUATION OF WATER LEVEL IN WELLS NORTH COASTAL REGION

1963

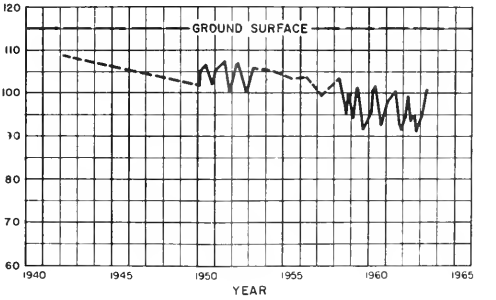
UKIAH VALLEY (1-15.00)
MENDOCINO COUNTY
WELL 15N/12W-8L1, M.D.B.&M.
GROUND SURFACE ELEVATION 668'



SANEL VALLEY (1-16.00)
MENDOCINO COUNTY
WELL 13N/11W-18E1, M.D.B.&M.
GROUND SURFACE ELEVATION 490'



SANTA ROSA VALLEY, SONOMA COUNTY (1-18.00)
SANTA ROSA AREA (1-18.01)
WELL 6N/8W-13R1, M.D.B.&M.
GROUND SURFACE ELEVATION 118'



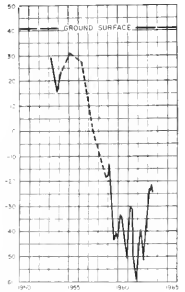
ELEVATION IN FEET - USC&GS DATUM

------ CONNECTS MEASUREMENTS MADE AT INTERVALS OF A YEAR OR MORE.

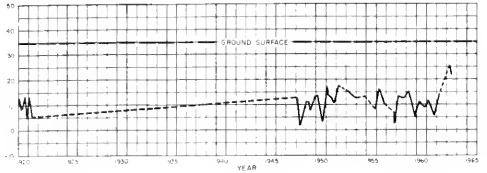
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
BAY AREA BRANCH
HYDROLOGIC DATA
CENTRAL COASTAL AREA

FLUCTUATION OF WATER LEVEL IN WELLS NORTH COASTAL REGION 1963

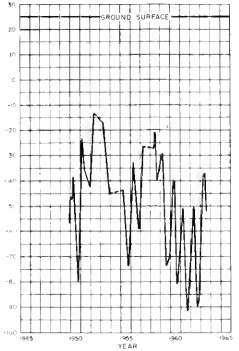
PETALUMA VALLEY (2-100)
SONOMA COUNTY
WELL 5N/7W-20B2, M.D.B.&M.
GROUND SURFACE ELEVATION 4'



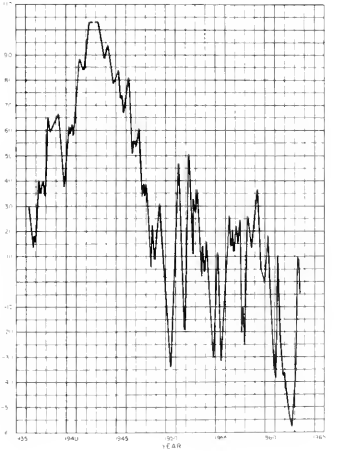
SUISUN-FAIRFIELD VALLEY (2-300)
SOLANO COUNTY
WELL 4N/2W-6A1, M.D.B.&M.
GROUND SURFACE ELEVATION 35'



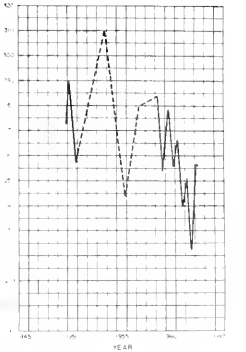
SANTA CLARA VALLEY (2-900)
SOUTH ALAMEDA COUNTY (2-901) LOWER AQUIFER
WELL 4S/2W-36K1, M.D.B.&M.
GROUND SURFACE ELEVATION 25'



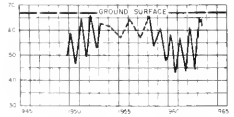
SANTA CLARA VALLEY (2-900)
NORTH SANTA CLARA COUNTY (2-902)
WELL 7S/1E-31A2, M.D.B.&M.
GROUND SURFACE ELEVATION 103'



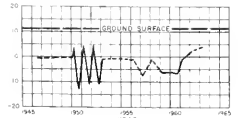
LIVERMORE VALLEY (2-1000)
ALAMEDA COUNTY
WELL 5S/1E-11M1, M.D.B.&M.
GROUND SURFACE ELEVATION 373'



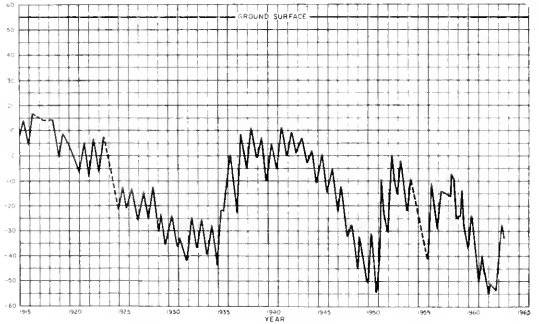
NAPA VALLEY (2-201)
NAPA COUNTY
WELL 6N/4W-17A1, M.D.B.&M.
GROUND SURFACE ELEVATION 41'



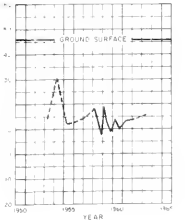
SONOMA VALLEY (2-202)
SONOMA COUNTY
WELL 5N/5W-28N1, M.D.B.&M.
GROUND SURFACE ELEVATION



SANTA CLARA VALLEY (2-900)
SOUTH ALAMEDA COUNTY (2-901) UPPER AQUIFER
WELL 4S/1W-29C4, M.D.B.&M.
GROUND SURFACE ELEVATION 45'



HALF MOON BAY TERRACE (2-2200)
SAN MATEO COUNTY
WELL 5S/5W-29N1, M.D.B.&M.
GROUND SURFACE ELEVATION 45'



ELEVATION IN FEET — U.S.C.&G.S. DATUM

ELEVATION IN FEET — U.S.C.&G.S. DATUM

------ CONNECTS MEASUREMENTS MADE AT INTERVALS OF A YEAR OR MORE

STATE OF CALIFORNIA
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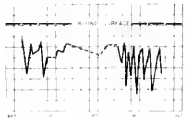
HYDROLOGIC DATA
CENTRAL COASTAL AREA

FLUCTUATION OF WATER LEVEL IN WELLS SAN FRANCISCO BAY REGION 1963

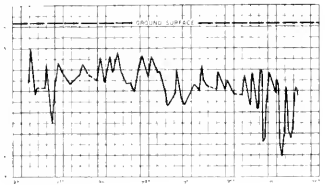
PLATE 5

PAJARO VALLEY (3-2.00)
MONTEREY COUNTY

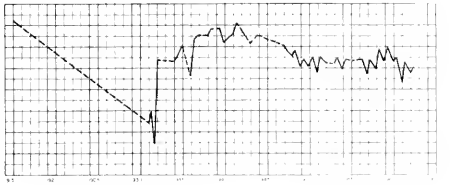


GILROY-HOLLISTER VALLEY (3-3.00)
SAN BENITO COUNTY (3-3.02)

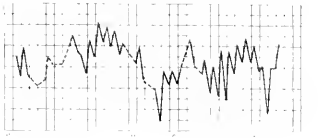
SALINAS VALLEY, MONTEREY COUNTY (3-4.00)
PRESSURE AREA - 180 FOOT AQUIFER (3-4.01)



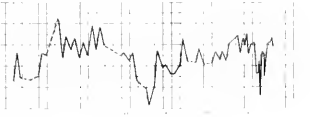
SALINAS VALLEY, MONTEREY COUNTY (3-4.00)
EAST SIDE AREA (3-4.02)



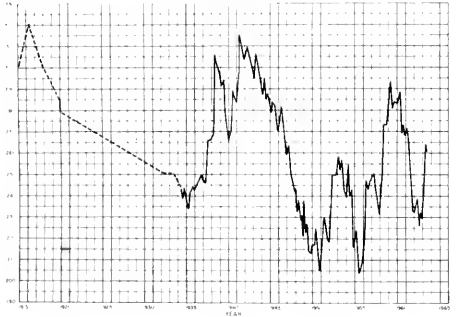
SALINAS VALLEY, MONTEREY COUNTY (3-4.00)
ARROYO SECO CONE (3-4.04)



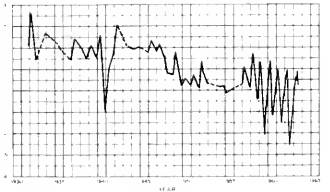
SALINAS VALLEY, MONTEREY COUNTY (3-4.00)



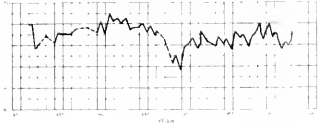
GILROY-HOLLISTER VALLEY (3-3.00)
SOUTH SANTA CLARA VALLEY (3-3.01)



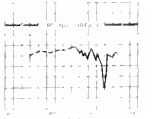
SALINAS VALLEY, MONTEREY COUNTY (3-4.00)
PRESSURE AREA - 400 FOOT AQUIFER (3-4.01)



SALINAS VALLEY, MONTEREY COUNTY (3-4.00)
FOREBAY AREA (3-4.03)

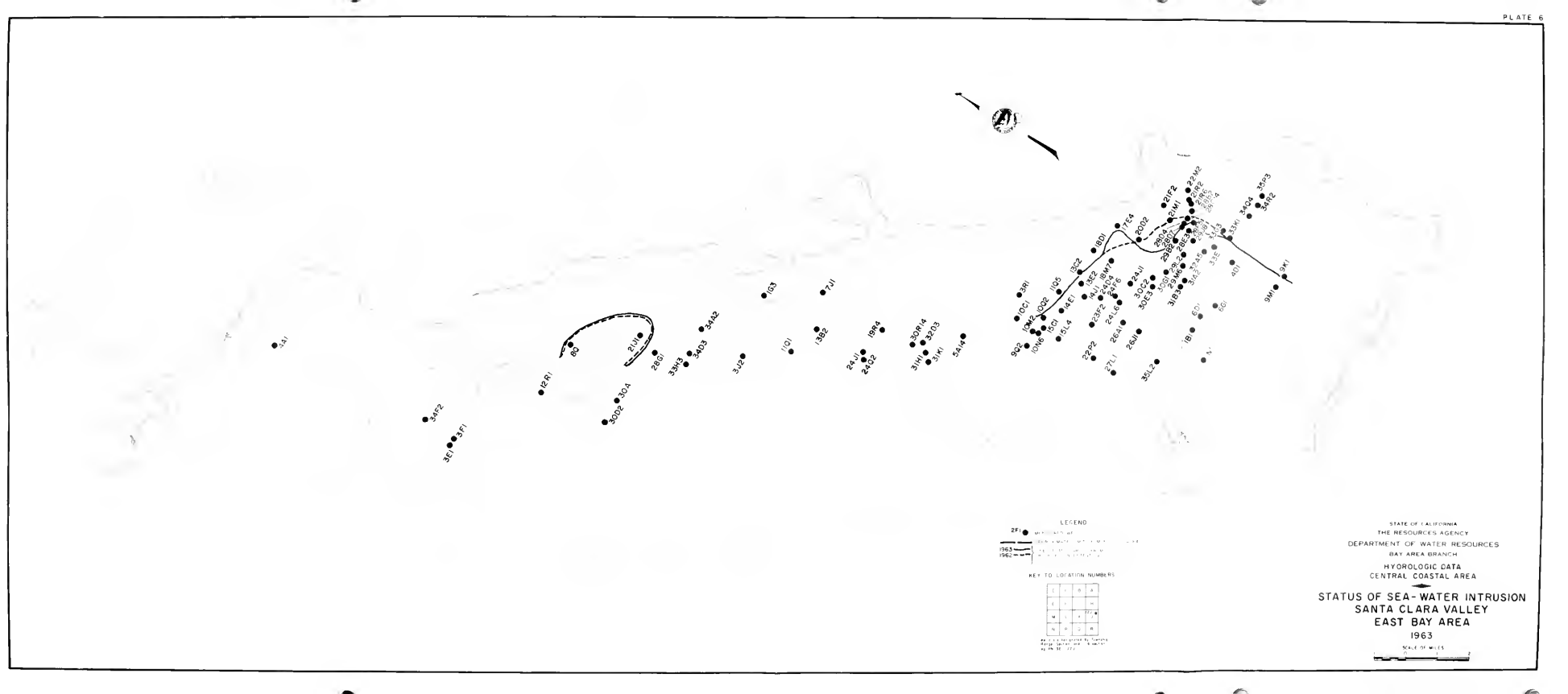


CARMEL VALLEY (3-7.00)
MONTEREY COUNTY



THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN LUIS AREA BRANCH
HYDROLOGIC DATA
CENTRAL COASTAL AREA

FLUCTUATION OF WATER LEVEL IN WELLS CENTRAL COASTAL REGION 1963


LEGEND
1963
1962
KEY TO LOCATION NUMBERS
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
BAY AREA BRANCH
HYDROLOGIC DATA
CENTRAL COASTAL AREA
STATUS OF SEA-WATER INTRUSION
SANTA CLARA VALLEY
EAST BAY AREA
1963
SCALE OF MILES

Foldout too large for digitization

May be added at a later date